

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Ann Marie Koss Examiner #: 78972 Date: 2/19/02
Art Unit: 1751 Phone Number 30 5-3176 Serial Number: 091852, 624
Mail Box and Bldg/Room Location: CP3 9B30 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): De La Motte

Earliest Priority Filing Date: 10/3/97

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

STAFF USE ONLY

Searcher: K. Fuller
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STRUCTURE FILE UPDATES: 27 FEB 2002 HIGHEST RN 396639-34-2
DICTIONARY FILE UPDATES: 27 FEB 2002 HIGHEST RN 396639-34-2

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files
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=> file hcaplus
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FILE COVERS 1907 - 28 Feb 2002 VOL 136 ISS 9
FILE LAST UPDATED: 27 Feb 2002 (20020227/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

CAS roles have been modified effective December 16, 2001. Please

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check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAPLUS files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

=> d que 170

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L57      1732 SEA FILE=REGISTRY ABB=ON  OXIDOREDUCTASE
L58      79334 SEA FILE=HCAPLUS ABB=ON  L57
L59      83302 SEA FILE=HCAPLUS ABB=ON  L58 OR ?OXIDOREDUCTASE?
L60      274 SEA FILE=HCAPLUS ABB=ON  L59(L) (HAIR OR KERATIN?)
L61      317 SEA FILE=HCAPLUS ABB=ON  L59(L) DYE?
L62      75 SEA FILE=HCAPLUS ABB=ON  L60 AND L61
L63      39 SEA FILE=HCAPLUS ABB=ON  L62 AND COUPL?
L64      22 SEA FILE=HCAPLUS ABB=ON  L62 AND ANION?(3A)SURFACT?
L65      35 SEA FILE=HCAPLUS ABB=ON  L62 AND (?GLUCOSE? OR ?SORBOSE? OR
      ?XYLOSE? OR GLYCEROL# OR DIHYDROXY(W)ACETONE OR LACTIC OR
      LACTATE OR PYRUV? OR URIC OR RATE)
L66      4 SEA FILE=HCAPLUS ABB=ON  L62 AND (?ACYLTAUR? OR ?ACYLISETHIO?
      OR ?ACYLSARCON? OR ?ACYLGLUTAMAT? OR FATTY(W)GLUTAMID? OR
      ?GALACTOSID? OR ?OXYALKYL?)
L67      0 SEA FILE=HCAPLUS ABB=ON  L62 AND ?GLUTAMID?
L68      4 SEA FILE=HCAPLUS ABB=ON  L66 OR L67
L69      58 SEA FILE=HCAPLUS ABB=ON  (L63 OR L64 OR L65 OR L66 OR L67 OR
      L68)
L70      53 SEA FILE=HCAPLUS ABB=ON  L69 AND (COMPOSITION? OR COMPNS)

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=> d 170 all 1-53 hitstr

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L70 ANSWER 1 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN 2002:89799 HCAPLUS
DN 136:139633
TI Enzyme composition for bleaching human keratinous fibres and
bleaching method
IN Lang, Gerard; Plos, Gregory
PA L'oreal, Fr.
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA French
IC ICM A61K007-135
CC 62-4 (Essential Oils and Cosmetics)
FAN.CNT 1

```

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002007689	A1	20020131	WO 2001-FR2093	20010629
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 PRAI FR 2000-9621 A 20000721
 AB The invention concerns a ready-to-use **compn.** for bleaching human **keratinous** fibers previoiusly **dyed** with oxidn. **dyes**, comprising at least a 4-electron **oxidoreductase** enzyme, and at least an enzymic mediator. The invention also concerns a bleaching method using said **compn.** A hair bleach contained 1-hydroxy-benzotriazole 0.1, laccase (from Rhus venicifear, 180 units/mg) 1.8, excipients and water q.s. 100 g. The **compn** is applied on hair for 30 min, the hair is then rinsed, washed with a shampoo, and dried to remover the hair color.
 ST enzyme hair bleach **oxidoreductase**
 IT Polyelectrolytes
 Surfactants
 (amphoteric; enzyme **compn.** for bleaching human keratinous fibers, and bleaching method)
 IT Polyelectrolytes
 Surfactants
 (anionic; enzyme **compn.** for bleaching human keratinous fibers, and bleaching method)
 IT Hair preparations
 (bleaches; enzyme **compn.** for bleaching human keratinous fibers, and bleaching method)
 IT Polyelectrolytes
 Surfactants
 (cationic; enzyme **compn.** for bleaching human keratinous fibers, and bleaching method)
 IT Hair preparations
 (dyes, oxidative; enzyme **compn.** for bleaching human keratinous fibers, and bleaching method)
 IT Antioxidants
 Cladosporium cladosporioides
 Opacifiers
 Perfumes
 Preservatives
 Sequestering agents
 Surfactants
 Thickening agents
 (enzyme **compn.** for bleaching human keratinous fibers, and bleaching method)
 IT Ceramides
 Enzymes, biological studies
 Polymers, biological studies
 Polysiloxanes, biological studies
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (enzyme **compn.** for bleaching human keratinous fibers, and bleaching method)
 IT Agaricus bisporus
 Anacardiaceae
 Apple
 Aspergillus nidulans
 Avocado (Persea americana)
 Banana (Musa)
 Botrytis cinerea
 Carrot
 Catharanthus roseus
 Ceriporiopsis subvermispota
 Cerrena unicolor
 Chaetomium thermophilum
 Coffee (Coffea)

Coprinus cinereus
 Dichomitus squalens
 Fomes fomentarius
 Ganoderma lucidum
 Ginkgo biloba
 Glomerella cingulata
 Heterobasidion annosum
 Horse chestnut (Aesculus)
 Iris (plant)
 Lacquer tree
 Lactarius piperatus
 Maple (Acer pseudoplatanus)
 Monotropa hypopitys
 Myceliophthora thermophila
 Neurospora crassa
 Panaeolus papilionaceus
 Panaeolus sphinctrinus
 Peach (Prunus persica)
 Phellinus noxius
 Pistacia palaestina
 Pleurotus ostreatus
 Podocarpaceae
 Podospora anserina
 Polyporus pinsitus
 Potato (Solanum tuberosum)
 Pyricularia oryzae
 Rhizoctonia solani
 Rigidoporus lignosus
 Rosemary
 Russula delica
 Schizophyllum commune
 Scytalidium
 Thelephora terrestris
 Trametes hirsuta
 Trametes versicolor
 Vinca minor
 (laccase from; enzyme **compn.** for bleaching human keratinous
 fibers, and bleaching method)

IT Surfactants
 (nonionic; enzyme **compn.** for bleaching human keratinous
 fibers, and bleaching method)

IT Surfactants
 (zwitterionic; enzyme **compn.** for bleaching human keratinous
 fibers, and bleaching method)

IT 50-53-3, Chlorpromazine, biological studies 84-08-2 84-97-9 87-39-8,
 Violuric acid 100-65-2, Phenylhydroxylamine 118-02-5 131-91-9,
 1-Nitroso 2-naphthol 132-53-6, 2-Nitroso-naphthol 134-96-3,
 Syringaldehyde 362-03-8, 10-Phenothiazinepropionic acid 362-04-9,
 Methyl 10 phenothiazinepropionate 524-38-9, N-Hydroxyphthalimide
 530-57-4, Syringic acid 530-59-6 546-88-3, N-Acetylhydroxylamine
 884-35-5, Methylsyringate 1207-72-3, 10-Methylphenothiazine 1532-72-5,
 Isoquinoline N-oxide 1613-37-2 1637-16-7, 10 Ethyl phenothiazine
 2007-19-4, 1-Nitroso 2-naphthol 3,6-disulfonic acid 2478-38-8,
 Acetosyringone 2592-95-2, 1-Hydroxybenzotriazole 3682-32-4, 2-Nitroso
 1-naphthol 4-sulfonic acid 3943-80-4, Ethylsyringate 4801-58-5,
 1-Hydroxypiperidine 5765-61-7, N,N-Diisopropylhydroxylamine 6066-82-6
 7152-42-3, 10 Phenylphenothiazine 7446-43-7, N,N-Dipropylhydroxylamine
 7803-49-8, Hydroxylamine, biological studies 9002-10-2,
 Tyrosinase 9003-99-0, Peroxidase 9055-15-6,
Oxidoreductase 15256-68-5 15375-48-1, 10 Propyl phenothiazine

17427-04-2, 10 Isopropyl phenothiazine 19607-03-5, 2-Chloro-10
methylphenothiazine 20962-92-9, 10 Allylphenothiazine 21977-42-4, 10
Phenoxazine propionic acid 22308-86-7, 4-Hydroxy-3-nitrosocoumarin
25324-52-1, 2-Acetyl 10 methylphenothiazine 36207-63-3D, alkyl derivs.
54784-33-7, 1,3-Dimethyl-5-nitroso-barbituric acid 59118-51-3,
1-Hydroxybenzimidazole 60411-11-2 80498-15-3, Laccase 90510-22-8,
Hexylsyringate 136832-74-1 157254-35-8, 4-Carboxy-10-phenoxazine
propionic acid 177959-98-7, Butylsyringate 177959-99-8, Octylsyringate
309744-02-3 325480-33-9

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(enzyme **compn.** for bleaching human **keratinous**
fibers, and bleaching method)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ciba; GB 2304107 A 1997 HCAPLUS
- (2) L'Oreal; EP 1062938 A 2000 HCAPLUS
- (3) Novo Nordisk; WO 9741215 A 1997 HCAPLUS
- (4) Novo Nordisk; WO 9840471 A 1998 HCAPLUS
- (5) Sorensen, N; US 5899212 A 1999

IT 9002-10-2, Tyrosinase 9055-15-6, **Oxidoreductase**
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(enzyme **compn.** for bleaching human **keratinous**
fibers, and bleaching method)

RN 9002-10-2 HCAPLUS

CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 2 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2002:89797 HCAPLUS

DN 136:139603

TI Enzyme **composition** for bleaching human keratinous fibers, and
bleaching method

IN Lang, Gerard; Plos, Gregory

PA L'oreal, Fr.

SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-135

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 2002007687	A1	20020131	WO 2001-FR2091	20010629
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI FR 2000-9620 A 20000721

AB The invention concerns a ready-to-use **compn.** for bleaching human

keratinous fibers previously dyed with direct dyes, in particular hair, comprising at least a 4-electron oxidoreductase enzyme, and at least an enzymic mediator. The invention also concerns a bleaching method using said compn. A hair bleach contained 1-hydroxy-benzotriazole 0.1, laccase (from Rhus venicifear, 180 units/mg) 1.8, excipients and water q.s. 100 g. The compn is applied on hair for 30 min, the hair is then rinsed, washed with a shampoo, and dried to remover the hair color.

ST enzyme hair bleach oxidoreductase

IT Polyelectrolytes

Surfactants

(amphoteric; enzyme compn. for bleaching human keratinous fibers, and bleaching method)

IT Polyelectrolytes

Surfactants

(anionic; enzyme compn. for bleaching human keratinous fibers, and bleaching method)

IT Hair preparations

(bleaches; enzyme compn. for bleaching human keratinous fibers, and bleaching method)

IT Dyes

Polyelectrolytes

Surfactants

(cationic; enzyme compn. for bleaching human keratinous fibers, and bleaching method)

IT Dyes

(direct; enzyme compn. for bleaching human keratinous fibers, and bleaching method)

IT Anthraquinone dyes

Antioxidants

Cladosporium cladosporioides

Opacifiers

Perfumes

Preservatives

Sequestering agents

Surfactants

Thickening agents

(enzyme compn. for bleaching human keratinous fibers, and bleaching method)

IT Ceramides

Enzymes, biological studies

Polymers, biological studies

Polysiloxanes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(enzyme compn. for bleaching human keratinous fibers, and bleaching method)

IT Agaricus bisporus

Anacardiaceae

Apple

Aspergillus nidulans

Avocado (Persea americana)

Banana (Musa)

Botrytis cinerea

Carrot

Catharanthus roseus

Ceriporiopsis subvermispota

Cerrena unicolor

Chaetomium thermophilum

Coffee (Coffea)

Coprinus cinereus
 Dichomitus squalens
 Fomes fomentarius
 Ganoderma lucidum
 Ginkgo biloba
 Glomerella cingulata
 Heterobasidion annosum
 Horse chestnut (Aesculus)
 Iris (plant)
 Lacquer tree
 Lactarius piperatus
 Maple (Acer pseudoplatanus)
 Monotropa hypopitys
 Myceliophthora thermophila
 Neurospora crassa
 Panaeolus papilionaceus
 Panaeolus sphinctrinus
 Peach (Prunus persica)
 Phellinus noxius
 Pistacia palaestina
 Pleurotus ostreatus
 Podocarpaceae
 Podospora anserina
 Polyporus pinsitus
 Potato (Solanum tuberosum)
 Pyricularia oryzae
 Rhizoctonia solani
 Rigidoporus lignosus
 Rosemary
 Russula delica
 Schizophyllum commune
 Scytalidium
 Thelephora terrestris
 Trametes hirsuta
 Trametes versicolor
 Vinca minor

(laccase from; enzyme compn. for bleaching human keratinous
 fibers, and bleaching method)

IT Surfactants
 (nonionic; enzyme compn. for bleaching human keratinous
 fibers, and bleaching method)

IT Surfactants
 (zwitterionic; enzyme compn. for bleaching human keratinous
 fibers, and bleaching method)

IT 50-53-3, Chlorpromazine, biological studies 84-08-2 84-97-9 87-39-8,
 Violuric acid 100-65-2, Phenylhydroxylamine 118-02-5,
 2,4-Dinitroso-1,3-dihydroxybenzene 131-91-9, 1-Nitroso 2-naphthol
 132-53-6, 2-Nitroso-naphthol 134-96-3, Syringaldehyde 362-03-8,
 10-Phenothiazinepropionic acid 362-04-9, Methyl 10
 phenothiazinepropionate 524-38-9, N-Hydroxyphthalimide 530-57-4,
 Syringic acid 530-59-6 546-88-3, N-Acetylhydroxylamine 884-35-5,
 Methylsyringate 1207-72-3, 10-Methylphenothiazine 1532-72-5,
 Isoquinoline N-oxide 1613-37-2 1637-16-7, 10 Ethyl phenothiazine
 2007-19-4, 1-Nitroso 2-naphthol 3,6-disulfonic acid 2478-38-8,
 Acetosyringone 2592-95-2, 1-Hydroxybenzotriazole 3682-32-4, 2-Nitroso
 1-naphthol 4-sulfonic acid 3943-80-4, Ethylsyringate 4801-58-5,
 1-Hydroxypiperidine 5765-61-7, N,N-Diisopropylhydroxylamine 6066-82-6
 7152-42-3, 10 Phenylphenothiazine 7446-43-7, N,N-Dipropylhydroxylamine
 7803-49-8, Hydroxylamine, biological studies 9002-10-2,
 Tyrosinase 9003-99-0, Peroxidase 9055-15-6,

Oxidoreductase 15256-68-5 15375-48-1, 10 Propyl phenothiazine
 17427-04-2, 10 Isopropyl phenothiazine 19607-03-5, 2-Chloro-10
 methylphenothiazine 20962-92-9, 10 Allylphenothiazine 21977-42-4, 10
 Phenoxazine propionic acid 22308-86-7, 4-Hydroxy-3-nitrosocoumarin
 25324-52-1, 2-Acetyl 10 methylphenothiazine 36207-63-3D, alkyl derivs.
 54784-33-7, 1,3-Dimethyl-5-nitroso-barbituric acid 59118-51-3,
 1-Hydroxybenzimidazole 60411-11-2 80498-15-3, Laccase 90510-22-8,
 Hexylsyringate 136832-74-1 157254-35-8, 4-Carboxy-10-phenoxazine
 propionic acid 177959-98-7, Butylsyringate 177959-99-8, Octylsyringate
 309744-02-3 325480-33-9, 1-Hydroxybenzotriazole sulfonic acid
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (enzyme **compn.** for bleaching human **keratinous**
 fibers, and bleaching method)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ciba; GB 2304107 A 1997 HCAPLUS
- (2) L'Oreal; EP 1062938 A 2000 HCAPLUS
- (3) Novo Nordisk; WO 9741215 A 1997 HCAPLUS
- (4) Novo Nordisk; WO 9840471 A 1998 HCAPLUS
- (5) Sorensen, N; US 5899212 A 1999

IT 9002-10-2, Tyrosinase 9055-15-6, **Oxidoreductase**
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (enzyme **compn.** for bleaching human **keratinous**
 fibers, and bleaching method)

RN 9002-10-2 HCAPLUS

CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 3 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:864704 HCAPLUS

DN 136:10880

TI Oxididant **compositions** for use in hair dye, hair wave, and hair
 bleaching **compositions**

IN Kravtchenko, Sylvain; Plos, Gregory

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-13

ICS A61K007-135; A61K007-09; A61K007-06

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1157684	A2	20011128	EP 2001-401171	20010507
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2808680	A1	20011116	FR 2000-6153	20000515
	JP 2001354527	A2	20011225	JP 2001-145697	20010515
PRAI	FR 2000-6153	A	20000515		
AB	Oxididant comps. for use in hair dye, hair wave, and hair bleaching comps. are disclosed comprising an enzymic oxidant such as oxidoreductase or peroxidase and a maleic anhydride-vinyl ether copolymer. An oxidant				

compn. contained uricase 20,000 U, Stabileze QM 1, polyglycerol monooleate 1, N-acetyl-L-cysteine 0.1, 2-amino-2-methyl-1-propanol q.s. pH = 9.5, uric acid 1, and water q.s. 100%.

- ST oxidant hair bleach enzyme **oxidoreductase** peroxidase;
hair dye oxidant enzyme **oxidoreductase**
peroxidase; wave hair oxidant enzyme **oxidoreductase**
peroxidase
- IT Polyelectrolytes
Surfactants
(amphoteric; oxidant **compns.** for use in hair dye, hair wave,
and hair bleaching **compns.**)
- IT **Surfactants**
(anionic; oxidant **compns.** for use in hair dye, hair
wave, and hair bleaching **compns.**)
- IT Radish (*Raphanus sativus*)
(black, peroxidases from; oxidant **compns.** for use in hair
dye, hair wave, and hair bleaching **compns.**)
- IT Hair preparations
(bleaches; oxidant **compns.** for use in hair dye, hair wave,
and hair bleaching **compns.**)
- IT Hair preparations
(dyes; oxidant **compns.** for use in hair dye, hair wave, and
hair bleaching **compns.**)
- IT Agaricus bisporus
Anacardiaceae
Apple
Aspergillus nidulans
Avocado (*Persea americana*)
Banana (*Musa*)
Botrytis cinerea
Carrot
Catharanthus roseus
Ceriporiopsis subvermisporea
Cerreia unicolor
Chaetomium thermophilum
Cladosporium cladosporioides
Coffee (*Coffea*)
Coprinus cinereus
Dichomitus squalens
Fomes fomentarius
Ganoderma lucidum
Ginkgo biloba
Glomerella cingulata
Heterobasidion annosum
Horse chestnut (*Aesculus*)
Iris (plant)
Lacquer tree
Lactarius piperatus
Maple (*Acer pseudoplatanus*)
Monotropa hypopitys
Myceliophthora thermophila
Neurospora crassa
Panaeolus papilionaceus
Panaeolus sphinctrinus
Peach (*Prunus persica*)
Phellinus noxius
Pistacia palaestina
Pleurotus ostreatus
Podocarpaceae
Podosporea anserina

Polyporus pinsitus
 Potato (Solanum tuberosum)
 Pyricularia oryzae
 Rhizoctonia solani
 Rigidoporus lignosus
 Rosemary
 Russula delica
 Schizophyllum commune
 Scytalidium
 Thelephora terrestris
 Trametes hirsuta
 Trametes versicolor
 Vinca minor
 (laccases from; oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)
 IT Surfactants
 (nonionic; oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)
 IT Solvents
 (org.; oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)
 IT Antioxidants
 Opacifiers
 Oxidizing agents
 Perfumes
 Preservatives
 Sequestering agents
 Surfactants
 Thickening agents
 (oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)
 IT Enzymes, biological studies
 Polymers, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)
 IT Hair preparations
 (permanent wave; oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)
 IT Acetobacter pasteurianus
 Apricot (Prunus armeniaca)
 Arthromyces ramosus
 Beet
 Cabbage
 Corn
 Cotton
 Garlic (Allium sativum)
 Microorganism
 Milk
 Mint
 Orange
 Raisin
 Rhubarb (Rheum)
 Soybean (Glycine max)
 Spinach (Spinacia oleracea)
 Staphylococcus faecalis
 (peroxidases from; oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)
 IT Surfactants

(zwitterionic; oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)

IT 91-20-3D, Naphthalene, polyhydroxyl derivs. 95-54-5D, 1,2-Benzenediamine, derivs. 95-55-6D, o-Aminophenol, derivs. 106-50-3D, 1,4-Benzenediamine, derivs. 108-45-2D, 1,3-Benzenediamine, derivs. 123-30-8D, p-Aminophenol, derivs. 533-31-3D, Sesamol, derivs. 2835-95-2, 2-Methyl-5-aminophenol 9001-05-2, Catalase 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate oxidase 9002-10-2, Tyrosinase 9002-12-4, Uricase 9003-99-0, Peroxidase 9011-16-9, Maleic anhydride-methyl vinyl ether copolymer 9013-66-5, Glutathione peroxidase 9028-67-5, Choline oxidase 9028-72-2, Lactate oxidase 9029-22-5, Sarcosine oxidase 9029-51-0 9029-52-1, Fatty acid peroxidase 9029-53-2, Cytochrome c peroxidase 9031-28-1, Iodide peroxidase 9032-24-0, Nadh peroxidase 9055-15-6, Oxidoreductase 9055-20-3, Chloride peroxidase 9082-61-5, Amino acidoxidase 27100-68-1, Maleic anhydride-vinyl ether copolymer 37250-80-9, Pyranose oxidase 66422-95-5 69151-32-2 69669-73-4, Glycerol oxidase 72906-87-7, L-Ascorbate peroxidase 80498-15-3, Laccase 80619-01-8, Bilirubin oxidase 136392-67-1, Stabileze QM
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)

IT 9001-37-0, Glucose oxidase 9002-10-2, Tyrosinase 9002-12-4, Uricase 9055-15-6, Oxidoreductase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidant **compns.** for use in hair dye, hair wave, and hair bleaching **compns.**)

RN 9001-37-0 HCAPLUS
CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-10-2 HCAPLUS
CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS
CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS
CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 4 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:796236 HCAPLUS
DN 135:348713
TI Oxidative hair dye **compositions** comprising 1-aminophenyl-pyrrolidine and a cationic polymer
IN Kravtchenko, Sylvain; Lagrange, Alain
PA L'Oreal, Fr.
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT Patent
LA French
IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1149577	A1	20011031	EP 2001-400881	20010405
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2807652	A1	20011019	FR 2000-4993	20000418
	JP 2001354532	A2	20011225	JP 2001-120412	20010418
PRAI	FR 2000-4993	A	20000418		
OS	MARPAT 135:348713				
AB	Oxidative hair dye compns. comprising 1-(4-aminophenyl)pyrrolidine and a cationic polymer are disclosed. A hair dye contained 1-(4-aminophenyl)-pyrrolidine dihydrochloride 0.470, 2,4-diamino-1-(.beta.-hydroxyethyloxy)-benzene dihydrochloride 0.482, a cationic polymer 1, excipients and water q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol hydrogen peroxide and applied on the hair for 30 min., the hair is then rinsed, washed with a shampoo, rinsed, and dried.				
ST	oxidative hair dye aminophenylpyrrolidine cationic polymer				
IT	Bromates				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(alkali metal; oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	Surfactants				
	(amphoteric; oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	Surfactants				
	(anionic; oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	Polyelectrolytes				
	Surfactants				
	(cationic; oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	Hair preparations				
	(dyes, oxidative; oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	Surfactants				
	(nonionic; oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	Salts, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(of peroxy acids; oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	Antioxidants				
	Coupling agents				
	Oxidizing agents				
	Thickening agents				
	(oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	Enzymes, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(oxidative hair dye compns. comprising aminophenylpyrrolidine and cationic polymer)				
IT	89-25-8	90-15-3	..alpha..-Naphthol	95-88-5	108-26-9 108-45-2,
	1,3-Benzenediamine, biological studies		108-46-3	1,3-Benzenediol,	
	biological studies		124-43-6	533-31-3, Sesamol	591-27-5 608-25-3

2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2
4664-16-8, 2,6-Dihydroxy-4-methylpyridine 4770-37-0, 6-Hydroxyindoline
7556-37-8 7722-84-1, Hydrogen peroxide, biological studies 9003-99-0,
Peroxidase 9036-19-5, Octoxynol 40 9055-15-6,
Oxidoreductase 16867-03-1, 2-Amino-3-hydroxypyridine
20493-87-2 20493-99-6 24938-91-8, Trideceth 12 30569-52-9,
3,6-Dimethylpyrazolo[3,2-c]-1,2,4-triazole 39365-90-7 55302-96-0
69151-32-2 70643-19-5 80498-15-3, Laccase 81892-72-0 83763-47-7
93846-05-0

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compns. comprising
aminophenylpyrrolidine and cationic polymer)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
- (2) Bittner Andreas Joachim; WO 9801106 A 1998 HCAPLUS
- (3) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
- (4) Oreal; FR 2458281 A 1981 HCAPLUS
- (5) Plue, A; US 3701769 A 1972 HCAPLUS
- (6) Schwarzkopf Gmbh Hans; DE 19728336 A 1998 HCAPLUS
- (7) Squibb Bristol Myers Co; EP 0891765 A 1999 HCAPLUS
- (8) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS
- (9) Yuh-Guo, P; US 5876464 A 1999 HCAPLUS

IT 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compns. comprising
aminophenylpyrrolidine and cationic polymer)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 5 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:796235 HCAPLUS

DN 135:348712

TI Oxidative hair dye compositions comprising 1-(4-
aminophenyl)pyrrolidine and a carbohydrate-based polymer

IN Kravtchenko, Sylvain; Lagrange, Alain

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1149576	A1	20011031	EP 2001-400880	20010405
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2807651	A1	20011019	FR 2000-4992	20000418
	JP 2001335445	A2	20011204	JP 2001-120413	20010418
PRAI	FR 2000-4992	A	20000418		

OS MARPAT 135:348712

AB Oxidative hair dye compns. comprising 1-(4-
aminophenyl)pyrrolidine and a carbohydrate-based polymer are disclosed. A
hair dye contained 1-(4-aminophenyl)-pyrrolidine dihydrochloride 0.470,

2,4-diamino-1-(.beta.-hydroxyethyloxy)-benzene dihydrochloride 0.482, nonionic guar gum 0.75, excipients and water q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol hydrogen peroxide and applied on the hair for 30 min., the hair is then rinsed, washed with a shampoo, rinsed, and dried.

ST oxidative hair dye aminophenylpyrrolidine carbohydrate polymer

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Surfactants

(amphoteric; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Surfactants

(anionic; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Polyelectrolytes

Surfactants

(cationic; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Hair preparations

(dyes, oxidative; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Phenols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(naphthols; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Surfactants

(nonionic; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Salts, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(of peroxy acids; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Antioxidants

Coupling agents

Oxidizing agents

Thickening agents

(oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT Enzymes, biological studies

Polysaccharides, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT 9000-30-0, Guar gum

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(Meypro-Guar 50, non-ionic; oxidative hair dye compns. comprising aminophenylpyrrolidine and carbohydrate-based polymer)

IT 89-25-8 90-15-3, .alpha.-Naphthol 95-88-5 108-26-9 108-45-2, 1,3-Benzenediamine, biological studies 108-45-2D, 1,3-Benzenediamine, derivs. 108-46-3, 1,3-Benzenediol, biological studies 124-43-6 533-31-3, Sesamol 591-27-5 591-27-5D, derivs. 608-25-3 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2 4664-16-8, 2,6-Dihydroxy-4-methylpyridine 4770-37-0, 6-Hydroxy indoline 7556-37-8

7722-84-1, Hydrogen peroxide, biological studies 9000-01-5, Gum arabic
 9000-07-1, Carrageenan 9000-28-6, Ghatti gum 9000-36-6, Karaya gum
 9000-40-2, Carob gum 9000-65-1, Tragacanth 9000-69-5, Pectin
 9002-18-0, Agar 9003-99-0, Peroxidase 9005-25-8, Starch, biological
 studies 9005-32-7, Alginic acid 9055-15-6,
Oxidoreductase 11138-66-2, Xanthan 16867-03-1,
 2-Amino-3-hydroxypyridine 30569-52-9, 3-6-Dimethylpyrazolo[3,2-c]-1,2,4-
 triazole 39464-87-4, Scleroglucan 55302-96-0 69151-32-2 70643-19-5
 80498-15-3, Laccase 81892-72-0 83763-47-7 93846-05-0
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. comprising
 aminophenylpyrrolidine and carbohydrate-based polymer)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
- (2) Bittner Andreas Joachim; WO 9801106 A 1998 HCAPLUS
- (3) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
- (4) Oreal; FR 2773472 A 1999 HCAPLUS
- (5) Samain, H; US 5685882 A 1997 HCAPLUS
- (6) Schwarzkopf Gmbh Hans; DE 19728336 A 1998 HCAPLUS
- (7) Squibb Bristol Myers Co; EP 0891765 A 1999 HCAPLUS
- (8) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS
- (9) Yuh-Guo, P; US 5876464 A 1999 HCAPLUS

IT 9055-15-6, **Oxidoreductase**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. comprising
 aminophenylpyrrolidine and carbohydrate-based polymer)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 6 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:796234 HCAPLUS

DN 135:348711

TI Oxidative hair dye compositions comprising 1-(4-aminophenyl)-
 pyrrolidine derivatives and a particular direct dye

IN Kravtchenko, Sylvain; Lagrange, Alain

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 100 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1149575	A1	20011031	EP 2001-400879	20010405
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2807650	A1	20011019	FR 2000-4991	20000418
	JP 2001335446	A2	20011204	JP 2001-120414	20010418
PRAI	FR 2000-4991	A	20000418		
OS	MARPAT 135:348711				
AB	Oxidative hair dye compns. comprise 1-(4-aminophenyl)- pyrrolidine and a particular direct dye such as nitrobenzene derivs. or quaternary ammonium derivs. A hair dye contained 1-(4-aminophenyl)-				

pyrrolidine dihydrochloride 0.235, 2,4-diamino-1-(.beta.-hydroxyethyloxy)-benzene dihydrochloride 0.241, Basic Red-51 0.168, excipients and water q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol hydrogen peroxide and applied on the hair for 30 min, the hair is then rinsed, washed with a shampoo, rinsed, and dried.

ST oxidative hair dye aminophenylpyrrolidine direct dye

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Hair preparations

(creams; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Dyes

(direct; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Hair preparations

(dyes, oxidative; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fatty; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Hair preparations

(gels; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Phenols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(naphthols; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Salts, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(of peroxy acids; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Solvents

(org.; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Antioxidants

Coupling agents

Opacifiers

Oxidizing agents

Preservatives

Reducing agents

Sequestering agents

Sunscreens

Thickening agents

(oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Acids, biological studies

Alkali metal hydroxides

Ceramides

Paraffin oils

Peroxisulfates

Polymers, biological studies

Polysiloxanes, biological studies

Vitamins

Waxes

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Group IIIA element compounds

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(perborates; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT Fats and Glyceridic oils, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(vegetable; oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT 89-25-8 90-15-3, .alpha.-Naphthol 95-54-5, o-Phenylenediamine, biological studies 95-55-6, o-Aminophenol 95-70-5 95-88-5 99-56-9 99-57-0 106-50-3, 1,4-Benzenediamine, biological studies 108-26-9 108-45-2, 1,3-Benzenediamine, biological studies 108-45-2D, 1,3-Benzenediamine, derivs. 108-46-3, 1,3-Benzenediol, biological studies 119-34-6 121-88-0 123-30-8, p-Aminophenol 124-43-6 533-31-3, Sesamol 570-24-1 591-27-5 591-27-5D, derivs. 603-85-0 608-25-3 610-81-1 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2784-94-3 2835-95-2 2871-01-4 2973-21-9 4664-16-8, 2,6-Dihydroxy-4-methyl pyridine 4770-37-0, 6-Hydroxyindoline 4926-55-0 5131-58-8 5307-14-2 6358-09-4 6687-56-5 7077-55-6 7267-43-8 7556-37-8 7575-35-1 7687-09-4 7687-11-8 7722-84-1, Hydrogen peroxide, biological studies 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase 10228-03-2 12270-25-6, Basic Red-51 13556-31-5 13586-81-7 16867-03-1, 2-Amino-3-hydroxypyridine 21425-62-7 24455-90-1 24905-87-1 27080-42-8 29705-39-3 30075-29-7 30569-52-9, 3,6-Dimethylpyrazolo[3,2-c]1,2,4-triazole 33229-34-4 38866-11-4 39838-87-4 41338-82-3 41338-83-4 41338-95-8 41338-98-1 41339-00-8 42476-20-0 50610-28-1 50982-74-6 51138-16-0 51473-40-6 51473-50-8 52132-00-0 52132-02-2 52132-03-3 52132-04-4 52132-05-5 52132-06-6 52132-11-3 52132-12-4 52132-13-5 52132-14-6 52132-15-7 52132-16-8 52132-17-9 52132-18-0 52132-19-1 52132-20-4 52132-21-5 52132-22-6 52132-23-7 52132-24-8 52132-25-9 52132-26-0 52132-27-1 52132-28-2 52132-30-6 52132-31-7 54940-81-7 55302-96-0 56932-44-6 57524-53-5 59405-36-6 59405-38-8 59405-42-4 59405-44-6 59405-54-8 59405-55-9 59405-57-1 59405-59-3 59405-61-7 59405-67-3 59405-69-5 59642-65-8 59642-67-0 59642-69-2 59642-73-8 59642-75-0 59642-77-2 59642-93-2 59642-95-4 59643-09-3 59643-10-6 59820-43-8 59820-63-2 62163-15-9 63810-68-4 64651-39-4 66095-81-6 66422-95-5 66748-37-6 68259-00-7 68912-02-7 69151-32-2 70643-19-5 73447-48-0 75655-00-4 77061-58-6 80062-31-3 80498-15-3, Laccase 81608-25-5 81612-54-6 82576-74-7 82576-75-8 82856-89-1 82856-91-5 82857-00-9 83763-47-7 83950-26-9 84741-77-5 84912-24-3 85765-48-6 86419-67-2 86419-73-0 86419-75-2 86419-76-3 89923-52-4 92888-19-2 92952-81-3 93569-38-1 93569-39-2 93846-05-0 93940-65-9 97404-02-9 99133-38-7 104226-19-9 104766-44-1 109023-83-8 109220-25-9 110220-09-2 131657-78-8 141973-33-3 143084-49-5 160598-04-9 161328-83-2 161328-85-4 161328-86-5 161328-87-6 161328-89-8 161328-91-2 161328-92-3 161328-94-5 161328-95-6 161328-96-7 161328-99-0 161329-01-7 161329-02-8 161329-06-2 161329-07-3 161329-08-4 161329-09-5 161329-15-3 161329-16-4 161329-17-5 161329-18-6 161329-22-2 161329-23-3 161329-25-5

161329-27-7	161329-28-8	161329-29-9	161329-30-2	161329-31-3
161329-35-7	161329-37-9	161329-38-0	161329-39-1	161329-40-4
161329-42-6	161329-43-7	161329-44-8	161329-45-9	161329-47-1
161329-49-3	163260-77-3	165672-34-4	167382-76-5	167382-77-6
167382-78-7	167382-79-8	167382-80-1	167382-82-3	167382-83-4
167382-87-8	167382-88-9	167382-95-8	167382-96-9	167382-97-0
167382-98-1	167382-99-2	178822-03-2	178822-05-4	209323-28-4
211050-61-2	220011-43-8	223577-35-3	223577-36-4	223577-37-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT	223577-38-6	223577-39-7	223577-40-0	223577-41-1	232284-18-3
	251352-40-6	251352-41-7	251352-42-8	251352-43-9	251352-44-0
	251352-45-1	251352-46-2	251352-47-3	251352-48-4	251352-49-5
	251352-50-8	251352-55-3	259545-90-9	370870-49-8	370871-23-1
	370871-25-3	370871-28-6	370871-30-0	370871-33-3	370871-35-5
	370871-37-7	370871-48-0	370872-18-7	370872-71-2	

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Akram, M; US 5067967 A 1991 HCAPLUS
- (2) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
- (3) Bittner Andreas Joachim; WO 9801106 A 1998 HCAPLUS
- (4) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
- (5) Oreal; EP 0920856 A 1999 HCAPLUS
- (6) Oreal; EP 0970687 A 2000 HCAPLUS
- (7) Plue, A; US 3701769 A 1972 HCAPLUS
- (8) Schwarzkopf GmbH Hans; DE 19728336 A 1998 HCAPLUS
- (9) Squibb Bristol Myers Co; EP 0891765 A 1999 HCAPLUS
- (10) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS
- (11) Yuh-Guo, P; US 5876464 A 1999 HCAPLUS

IT 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 7 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:780635 HCAPLUS

DN 135:335001

TI Oxidation dyeing composition for keratinous fibers comprising a 3,5-diamino-pyridine derivative and a cationic or amphoteric polymer

IN Audousset, Marie-pascale

PA L'oreal, Fr.

SO PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2001078669 A1 20011025 WO 2001-FR847 20010321
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
FR 2807654 A1 20011019 FR 2000-4720 20000412
PRAI FR 2000-4720 A 20000412
OS MARPAT 135:335001
AB The invention concerns an oxidn. dyeing **compn.** for keratinous fibers, in particular human keratinous dyeing such as hair comprising, in a medium suitable for dyeing, at least a **coupling** agent selected among 3,5-diamino-pyridine derivs. and their addn. salts with an acid, at least an oxidn. base, and at least a particular cationic or amphoteric polymer. The invention also concerns dyeing methods and devices using said **compn.** An oxidative hair dye contained 2,6-dimethoxy-3,5-diamino-pyridine hydrochloride 0.363, p-phenylenediamine 0.324, 2,4-diamino-1-(.beta.-hydroxy-ethoxy)benzene 0.361, a quaternary ammonium polymer 2.16, excipients and water q.s.100 g. Equal amt. of the **compn.** is mixed with 20 vol. hydrogen peroxide, the pH is adjusted to 3, then applied on the hair for 30 min. The hair is then rinsed, washed with shampoo, and dried to obtain a strong brown color.
ST oxidn hair dye aminopyridine deriv polymer
IT Polysiloxanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
((aminoethyl)amino)propyl hydroxy, di-Me, trimethylsilyl; oxidn. dyeing **compn.** for keratinous fibers comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT Polysiloxanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(amino-contg.; oxidn. dyeing **compn.** for keratinous fibers comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT Polyelectrolytes
(amphoteric; oxidn. dyeing **compn.** for keratinous fibers comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT Polyelectrolytes
(cationic; oxidn. dyeing **compn.** for keratinous fibers comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT Dyes
(direct; oxidn. dyeing **compn.** for keratinous fibers comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT Hair preparations
(dyes, oxidative; oxidn. dyeing **compn.** for keratinous fibers comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(naphthols; oxidn. dyeing **compn.** for keratinous fibers comprising diamino-pyridine deriv. and cationic or amphoteric polymer)
IT Salts, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(of peroxy acids; oxidn. dyeing **compn.** for keratinous fibers

comprising diamino-pyridine deriv. and cationic or amphoteric polymer)

IT Antioxidants
Coupling agents
Oxidizing agents
Reducing agents
(oxidn. dyeing compn. for keratinous fibers comprising
diamino-pyridine deriv. and cationic or amphoteric polymer)

IT Acrylic polymers, biological studies
Bromates
Enzymes, biological studies
Polyurethanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oxidn. dyeing compn. for keratinous fibers comprising
diamino-pyridine deriv. and cationic or amphoteric polymer)

IT Quaternary ammonium compounds, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(polymers; oxidn. dyeing compn. for keratinous fibers
comprising diamino-pyridine deriv. and cationic or amphoteric polymer)

IT 79-10-7D, Acrylic acid, derivs., polymers contg. 79-10-7D, Acrylic acid,
polymers with quaternary ammonium derivs. 79-41-4D, Methacrylic acid,
polymers with quaternary ammonium derivs. 95-55-6, o-Aminophenol
106-50-3, 1,4-Benzenediamine, biological studies 108-45-2,
1,3-Benzenediamine, biological studies 110-16-7D, Maleic acid, polymers
with quaternary ammonium derivs. 112-02-7, Trimethylcetylammonium
chloride 123-30-8, p-Aminophenol 124-43-6 591-27-5 598-79-8D,
.alpha.-Chloroacrylic acid, polymers with quaternary ammonium derivs.
7722-84-1, Hydrogen peroxide, biological studies 9003-39-8,
Vinylpyrrolidone homopolymer 9003-99-0, Peroxidase 9036-19-5,
Octoxynol 40 9055-15-6, Oxidoreductase 10124-68-2D,
N-Octylacrylamide, polymers contg. 24171-27-5D, polymers contg.
24938-91-8, Trideceth 12 39365-90-7, Isolaureth 56216-28-5
66422-95-5 80498-15-3, Laccase 85679-78-3 117907-42-3 154245-39-3
367269-14-5
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oxidn. dyeing compn. for keratinous
fibers comprising diamino-pyridine deriv. and cationic or amphoteric
polymer)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Hoeffkes, H; US 4698065 A 1987 HCAPLUS
(2) Lang, G; US 4923977 A 1990 HCAPLUS
(3) Lang, G; US 5279616 A 1994 HCAPLUS
(4) Moeller, H; US 5743919 A 1998 HCAPLUS
(5) Wella Ag; DE 4018335 A 1991 HCAPLUS

IT 9055-15-6, Oxidoreductase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oxidn. dyeing compn. for keratinous
fibers comprising diamino-pyridine deriv. and cationic or amphoteric
polymer)

RN 9055-15-6 HCAPLUS
CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 8 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:780634 HCAPLUS

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

DN 135:335000
 TI Oxidation dyeing **composition** for keratinous fibers comprising a
 3,5-diamino-pyridine derivative and a particular thickening polymer
 IN Audousset, Marie-pascale
 PA L'oreal, Fr.
 SO PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001078668	A1	20011025	WO 2001-FR846	20010321
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	FR 2807649	A1	20011019	FR 2000-4721	20000412
PRAI	FR 2000-4721	A	20000412		
OS	MARPAT 135:335000				
AB	The invention concerns an oxidn. dyeing compn. for keratinous fibers, in particular human keratinous fibers such as hair, comprising, in a medium suitable for dyeing, at least a coupling agent selected among 3,5-diamino-pyridine derivs. and their addn. salts with an acid, at least an oxidn. base, and a particular thickening polymer. The invention also concerns dyeing methods and devices using said compn. An oxidative hair dye contained 2,6-dimethoxy-3,5-diamino-pyridine hydrochloride 0.363, p-phenylenediamine 0.324, 2,4-diamino-1-(.beta.-hydroxy-ethoxy)benzene 0.361, Aculyn-44 4, excipients and water q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol. hydrogen peroxide, the pH is adjusted to 3, then applied on the hair for 30 min. The hair is then rinsed, washed with shampoo, and dried to obtain a natural brown color.				
ST	oxidn hair dye aminopyridine deriv thickening polymer				
IT	Surfactants (amphoteric; oxidn. dyeing compn. for keratinous fibers comprising diamino-pyridine deriv. and particular thickening polymer)				
IT	Polyelectrolytes Surfactants (anionic; oxidn. dyeing compn. for keratinous fibers comprising diamino-pyridine deriv. and particular thickening polymer)				
IT	Polyelectrolytes Surfactants (cationic; oxidn. dyeing compn. for keratinous fibers comprising diamino-pyridine deriv. and particular thickening polymer)				
IT	Hair preparations (dyes, oxidative; oxidn. dyeing compn. for keratinous fibers comprising diamino-pyridine deriv. and particular thickening polymer)				
IT	Phenols, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (naphthols; oxidn. dyeing compn. for keratinous fibers)				

comprising diamino-pyridine deriv. and particular thickening polymer)

IT Salts, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (of peroxy acids; oxidn. dyeing compn. for keratinous fibers
 comprising diamino-pyridine deriv. and particular thickening polymer)

IT **Coupling agents**
 Thickening agents
 (oxidn. dyeing compn. for keratinous fibers comprising
 diamino-pyridine deriv. and particular thickening polymer)

IT Bromates
 Enzymes, biological studies
 Polymers, biological studies
 Polysaccharides, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidn. dyeing compn. for keratinous fibers comprising
 diamino-pyridine deriv. and particular thickening polymer)

IT 79-10-7, Acrylic acid, biological studies 79-10-7D, Acrylic acid,
 polymers with alkyl acrylates 95-55-6, o-Aminophenol 106-50-3,
 p-Phenylenediamine, biological studies 123-30-8, p-Aminophenol
 124-43-6 591-27-5 7722-84-1, Hydrogen peroxide, biological studies
 9000-01-5, Gumarabic 9000-07-1, Carrageenan 9000-28-6, Ghatti gum
 9000-30-0, Guar gum 9000-36-6, Karaya gum 9000-40-2, Carob gum
 9000-65-1, Tragacanth gum 9000-69-5, Pectins 9002-18-0, Agar
 9003-01-4, PolyAcrylic acid 9003-99-0, Peroxidase 9004-64-2,
 Hydroxypropyl cellulose 9005-32-7, Alginic acid 9055-15-6,
Oxidoreductase 11138-66-2, Xanthan 26100-47-0,
 Acrylamide-Ammonium acrylate copolymer 28214-57-5, Ammonium acrylate
 homopolymer 39421-75-5, Jaguar hp105 39464-87-4, Scleroglucan
 40623-73-2 54381-16-7 56216-28-5 66422-95-5 85679-78-3
 117907-42-3 138757-67-2, Carbopol 980- 160950-38-9 193487-42-2,
 Aculyn-44 367269-14-5
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidn. dyeing compn. for keratinous
 fibers comprising diamino-pyridine deriv. and particular thickening
 polymer)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Hoeffkes, H; US 4698065 A 1987 HCAPLUS
- (2) Lang, G; US 4923977 A 1990 HCAPLUS
- (3) Lang, G; US 5279616 A 1994 HCAPLUS
- (4) Moeller, H; US 5743919 A 1998 HCAPLUS
- (5) Wella Ag; DE 4018335 A 1991 HCAPLUS

IT 9055-15-6, **Oxidoreductase**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidn. dyeing compn. for keratinous
 fibers comprising diamino-pyridine deriv. and particular thickening
 polymer)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 9 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:780402 HCAPLUS

DN 135:322520

TI Oxidative hair dye composition containing 1-(4-aminophenyl)-

pyrrolidine and an enzymatic oxidation system

IN Kravtchenko, Sylvain; Plos, Gregory

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1147763	A1	20011024	EP 2001-400882	20010405
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2807653	A1	20011019	FR 2000-4994	20000418
	JP 2001354533	A2	20011225	JP 2001-120415	20010418
	US 2002020029	A1	20020221	US 2001-836411	20010418
PRAI	FR 2000-4994	A	20000418		
OS	MARPAT 135:322520				
AB	An oxidative hair dye compn. contg. 1-(4-aminophenyl)-pyrrolidine and an enzymic oxidn. system comprising an oxidoreductase or peroxidase enzyme is disclosed. A hair dye compn. contained uricas 10x103 units, 1-(4-aminophenyl)-pyrrolidine dihydrochloride 0.705, 1-.beta.-hydroxyethyloxy-2,4-diaminobenzene dihydrochloride 0.723, N-acetyl-L-cysteine 0.10, uric acid 1, polyglycerol monooleate 1, Aculyn-22 0.75 g, 2-amino-2-methyl-1-propanol q.s. pH = 9.5, and water q.s. 100 g.				
ST	oxidative hair dye aminophenyl pyrrolidine enzyme				
IT	Dyes (acid; oxidative hair dye compn. contg. 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)				
IT	Dyes (cationic; oxidative hair dye compn. contg. 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)				
IT	Hair preparations (creams; oxidative hair dye compn. contg. 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)				
IT	Hair preparations (dyes, oxidative; oxidative hair dye compn. contg. 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)				
IT	Hair preparations (gels; oxidative hair dye compn. contg. 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)				
IT	Agaricus bisporus Anacardiaceae Aspergillus nidulans Avocado (Persea americana) Banana (Musa) Botrytis cinerea Carrot Catharanthus roseus Ceriporiopsis subvermisporea Cerreana unicolor Chaetomium thermophilum Cladosporium cladosporioides Coffee (Coffea) Coprinus cinereus Dichomitus squalens				

Fomes fomentarius
 Ganoderma lucidum
 Ginkgo biloba
 Glomerella cingulata
 Heterobasidion annosum
 Horse chestnut (Aesculus)
 Iris (plant)
 Lacquer tree
 Lactarius piperatus
 Maple (Acer pseudoplatanus)
 Monotropa hypopitys
 Myceliophthora thermophila
 Neurospora crassa
 Panaeolus papilionaceus
 Panaeolus sphinctrinus
 Peach (Prunus persica)
 Phellinus noxius
 Pistacia palaestina
 Pleurotus ostreatus
 Podocarpaceae
 Podospora anserina
 Polyporus pinsitus
 Potato (Solanum tuberosum)
 Pyricularia oryzae
 Rhizoctonia solani
 Rigidoporus lignosus
 Rosemary
 Russula delica
 Schizophyllum commune
 Scytalidium
 Thelephora terrestris
 Trametes hirsuta
 Trametes versicolor
 Vinca minor

(laccase obtained from; oxidative hair dye **compn.** contg.
 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)

IT Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(naphthols; oxidative hair dye **compn.** contg.
 1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)

IT Acetobacter pasteurianus
 Anthraquinone dyes
 Arthromyces ramosus
 Azo dyes
 Enterococcus faecalis
 Microorganism

(oxidative hair dye **compn.** contg. 1-(4-aminophenyl)-
 pyrrolidine and enzymic oxidn. system)

IT Enzymes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye **compn.** contg. 1-(4-aminophenyl)-
 pyrrolidine and enzymic oxidn. system)

IT Apple
 Apricot (Prunus armeniaca)
 Barley
 Beet (Beta vulgaris rapacea)
 Cabbage
 Corn

Cotton
Garlic (Allium sativum)
Mint
Radish (Raphanus sativus)
Raisin
Rhubarb (Rheum)
Soybean (Glycine max)
Spinach (Spinacia oleracea)

(peroxidase obtained from; oxidative hair dye compn. contg.
1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)

IT Albumins, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(serum; oxidative hair dye compn. contg. 1-(4-aminophenyl)-
pyrrolidine and enzymic oxidn. system)

IT 89-25-8 90-15-3, .alpha.-Naphthol 95-88-5, 4-Chloro
1,3-dihydroxybenzene 108-26-9 108-45-2, 1,3-Diaminobenzene, biological
studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 533-31-3,
Sesamol 591-27-5, 3 Aminophenol 608-25-3, 1,3-Dihydroxy-2-
methylbenzene 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole
2835-95-2, 2 Methyl 5 aminophenol 4664-16-8 4770-37-0,
6-Hydroxyindoline 7556-37-8 9001-37-0, Glucose
oxidase 9001-96-1, Pyruvate oxidase 9002-10-2,
Tyrosinase 9002-12-4, Uricase 9003-99-0, Peroxidase
9013-66-5, Glutathione peroxidase 9028-67-5, Choline oxidase
9028-72-2, Lactate oxidase 9029-22-5, Sarcosine oxidase
9029-51-0 9029-52-1, Fatty acid peroxidase 9029-53-2, Cytochrome c
peroxidase 9031-28-1, Iodide peroxidase 9032-24-0, Nadh peroxidase
9055-15-6, Oxidoreductase 9055-20-3, Chloride
peroxidase 9082-61-5, Aminoacid oxidase 16867-03-1 30569-52-9
54381-16-7 55302-96-0 66422-95-5 69151-32-2 69669-73-4,
Glycerol oxidase 70643-19-5 72906-87-7 80498-15-3, Laccase
80619-01-8, Bilirubin oxidase 81892-72-0 83763-47-7 93846-05-0
163260-77-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compn. contg.
1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Bristol-Myers Squibb Company; US 5851237 A 1998 HCAPLUS
- (2) Bristol-Myers Squibb Company; EP 0891765 A 1999 HCAPLUS
- (3) Kyowa Hakko Kogyo Kk Et Al; EP 0310675 A 1989 HCAPLUS
- (4) Oreal, L; FR 2773478 A 1999 HCAPLUS

IT 9001-37-0, Glucose oxidase 9002-10-2,
Tyrosinase 9002-12-4, Uricase 9055-15-6,
Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compn. contg.
1-(4-aminophenyl)-pyrrolidine and enzymic oxidn. system)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-10-2 HCAPLUS

CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 10 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:729700 HCAPLUS

DN 135:277747

TI Oxidative hair dyes containing pyridine derivatives and enzymic oxidants

IN Plos, Gregory

PA L'oreal, Fr.

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-13

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1138318	A2	20011004	EP 2001-400746	20010322
	EP 1138318	A3	20011121		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2806908	A1	20011005	FR 2000-4061	20000330
	JP 2001278755	A2	20011010	JP 2001-97004	20010329
	BR 2001001699	A	20011204	BR 2001-1699	20010329
	CN 1324608	A	20011205	CN 2001-112304	20010329
	US 2002013973	A1	20020207	US 2001-820016	20010329
PRAI	FR 2000-4061	A	20000330		
OS	MARPAT 135:277747				
AB	The title hair dyes are claimed. An oxidative hair dye compn. contained 2,6-dimethoxy-3,5-diaminopyridine dihydrochloride 0.636, paraphenylenediamine 0.324, laccase 5, water and excipients q.s. 100 g. The compn. is applied on the hair for 30 min, the hair is then rinsed, washed with shampoo, and dried to obtain a dark blue color.				
ST	oxidative hair dye pyridine enzymic oxidant				
IT	Hair preparations (dyes, oxidative; oxidative hair dyes contg. pyridine derivs. and enzymic oxidants)				
IT	Oxidizing agents (oxidative hair dyes contg. pyridine derivs. and enzymic oxidants)				
IT	Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dyes contg. pyridine derivs. and enzymic oxidants)				
IT	89-25-8 90-15-3, .alpha.-Naphthol 92-65-9 93-05-0 95-55-6, 2 aminophenol 95-70-5 95-88-5, 4-Chloro-1,3-dihydroxybenzene 99-98-9 101-54-2 106-50-3, p-Phenylenediamine, biological studies 108-26-9 108-45-2, 1,3-Diaminobenzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 110-86-1D, Pyridine, derivs. 123-30-8, p-Aminophenol 148-71-0 289-95-2D, Pyrimidine, derivs. 399-95-1, 4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluoro phenol 533-31-3, Sesamol 537-65-5 591-27-5, 3 aminophenol 608-25-3, 1,3-Dihydroxy-2-methyl benzene 615-66-7 1630-11-1 2359-52-6 2359-53-7 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2835-95-2, 2-Methyl-5-Aminophenol 2835-96-3, 4-Amino-2-methyl phenol				

2835-98-5, 2-amino-5-methylphenol 2835-99-6, 4-Amino-3-methyl phenol
 4664-16-8, 2,6-Dihydroxy-4-methyl pyridine 4770-37-0, 6-Hydroxyindoline
 5306-96-7 5862-80-6 6393-01-7 6604-51-9 7218-02-2 7469-77-4,
 2-Methyl-1-naphthol 7556-37-8 7575-35-1 9001-05-2, Catalase
 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate
 oxidase 9002-10-2, Tyrosinase 9002-12-4, Uricase
 9003-99-0, Peroxidase 9013-66-5, Glutathione peroxidase 9028-72-2,
 Lactate oxidase 9029-51-0 9029-52-1, Fatty acid peroxidase
 9029-53-2, Cytochrome peroxidase 9031-28-1, Iodide peroxidase
 9032-24-0, NADH peroxidase 9055-20-3, Chloride peroxidase 14791-78-7
 16867-03-1, 2-Amino-3-hydroxypyridine 17672-22-9, 2-amino-6-methylphenol
 28020-38-4 29785-47-5, 4-Amino-2-methoxymethyl phenol 30569-52-9,
 3,6-Dimethyl-pyrazolo[3,2-c]1,2,4-triazole 37250-80-9, Pyranose oxidase
 39455-90-8D, Pyrazolone, derivs. 55302-96-0 56216-28-5 63969-43-7
 66566-48-1 69669-73-4, Glycerol oxidase 70643-19-5
 72906-87-7, Ascorbate peroxidase 73793-80-3 79352-72-0,
 4-Amino-2-aminomethyl phenol 80467-77-2 80498-15-3, Laccase
 81892-72-0 83763-47-7 85679-78-3 90817-34-8 93841-24-8
 94166-62-8 97902-52-8 104333-09-7, 4-Amino-2-hydroxymethyl phenol
 105293-89-8 105607-68-9 110952-46-0 126335-43-1 129697-50-3,
 5-acetamido-2-amino phenol 130582-53-5 135855-34-4 135855-35-5
 168202-61-7, 4-Amino-3-hydroxymethyl phenol 207568-58-9 217318-23-5
 221110-58-3 221110-59-4 232284-14-9 362612-41-7 362612-43-9
 362612-44-0 362612-48-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dyes contg. pyridine derivs. and
 enzymic oxidants)

IT 9001-37-0, Glucose oxidase 9002-10-2,
 Tyrosinase 9002-12-4, Uricase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dyes contg. pyridine derivs. and
 enzymic oxidants)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-10-2 HCAPLUS

CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 11 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:703875 HCAPLUS

DN 135:231479

TI **Composition** for oxidative dyeing of keratinic fibers comprising
 two special quaternary polyammonium compounds

IN Bebot, Cecile; Rondeau, Christine; Cottard, Francois; Boudy, Francoise

PA L'Oreal, Fr.

SO Fr. Demande, 42 pp.

CODEN: FRXXBL

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2803198	A1	20010706	FR 1999-16764	19991230
	EP 1142553	A1	20011010	EP 2000-403474	20001211
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 2000006554	A	20010731	BR 2000-6554	20001228
	CN 1303663	A	20010718	CN 2000-131089	20001229
	US 2002013972	A1	20020207	US 2001-750717	20010102
	JP 2001206826	A2	20010731	JP 2001-252	20010104
PRAI	FR 1999-16764	A	19991230		
OS	MARPAT 135:231479				
AB	<p>Oxidative hair dye prepn. contg. a dialkyldiallylammonium cyclohomopolymer and a quaternary ammonium polymer are claimed. An oxidant compn. contained fatty alc. 2.3, ethoxylated fatty alc. 0.6, fatty amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, fragrance q.s., and water q.s. 100 g. A hair dye compn. contained Nafol 20-22 3, Nafolox 20-22 1.35, ethoxylated stearyl alc. 6, oleic acid 2.6, glycol distearate 2, propylene glycol 5, copra acid monoisopropanolamide 2, Aculyn-44 1.4, crosslinked polyacrylic acid 0.6, cationic polymers 3, Merquat-100 0.4, reducing agent 0.7, sequestering agents 0.2, 1,3-dihydroxybenzene 0.6, 1,4-diaminobenzene 0.5, 1-hydroxy-3-aminobenzene 0.1, 1-hydroxy-2-aminobenzene 0.05, 1-hydroxy-4-aminobenzene 0.09, 6-hydroxybenzomorpholine 0.017, 1-.beta.-hydroxyethyloxy-2,4-diaminobenzene dihydrochloride 0.039, propylene glycol monobutyl ether 2.5, monoethanolamine 1.06, 20.5% ammonia 11.1, and water q.s. 100 g. One part of the dye compn. is mixed with 1.5 parts of oxidant compn. and applied on a 90% white hair for 30 min., the hair is then rinsed with water, washed with shampoo, rinsed and dried to obtain a clear chestnut color.</p>				
ST	oxidative hair dye alkyldiallylammonium cyclohomopolymer; quaternary ammonium polymer oxidative hair dye				
IT	<p>Bromates</p> <p>RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)</p> <p>(alkali metal salts; oxidative hair dye prepn. comprising dialkyldiallylammonium cyclohomopolymer and quaternary ammonium polymer)</p>				
IT	<p>Surfactants</p> <p>(amphoteric; oxidative hair dye prepn. comprising dialkyldiallylammonium cyclohomopolymer and quaternary ammonium polymer)</p>				
IT	<p>Polyelectrolytes</p> <p>Surfactants</p> <p>(anionic; oxidative hair dye prepn. comprising dialkyldiallylammonium cyclohomopolymer and quaternary ammonium polymer)</p>				
IT	<p>Polyelectrolytes</p> <p>Surfactants</p> <p>(cationic; oxidative hair dye prepn. comprising dialkyldiallylammonium cyclohomopolymer and quaternary ammonium polymer)</p>				
IT	<p>Dyes</p> <p>(direct; oxidative hair dye prepn. comprising dialkyldiallylammonium cyclohomopolymer and quaternary ammonium polymer)</p>				
IT	<p>Hair preparations</p> <p>(dyes, oxidative; oxidative hair dye prepn. comprising dialkyldiallylammonium cyclohomopolymer and quaternary ammonium polymer)</p>				
IT	Alcohols, biological studies				

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(fatty; oxidative hair dye prepn. comprising dialkyldiallylammonium
cyclohomopolymer and quaternary ammonium polymer)

IT Surfactants
(nonionic; oxidative hair dye prepn. comprising dialkyldiallylammonium
cyclohomopolymer and quaternary ammonium polymer)

IT Salts, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(of peroxy acids; oxidative hair dye prepn. comprising
dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
polymer)

IT **Coupling agents**
Oxidizing agents
Reducing agents
Surfactants
Thickening agents
(oxidative hair dye prepn. comprising dialkyldiallylammonium
cyclohomopolymer and quaternary ammonium polymer)

IT Enzymes, biological studies
Polymers, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oxidative hair dye prepn. comprising dialkyldiallylammonium
cyclohomopolymer and quaternary ammonium polymer)

IT Quaternary ammonium compounds, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(polymers; oxidative hair dye prepn. comprising dialkyldiallylammonium
cyclohomopolymer and quaternary ammonium polymer)

IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(vegetable; oxidative hair dye prepn. comprising dialkyldiallylammonium
cyclohomopolymer and quaternary ammonium polymer)

IT 79-10-7D, Acrylic acid, polymers with dimethyldiallylammonium salts
108-45-2D, 1,3-Benzenediamine, derivs. 110-86-1D, Pyridine, derivs.
124-43-6 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs.
591-27-5D, derivs. 7722-84-1, Hydrogen peroxide, biological studies
9000-30-0D, Guar gum, derivs. 9003-99-0, Peroxidase 9004-34-6D,
Cellulose, derivs. 9055-15-6, **Oxidoreductase**
17126-47-5D, Ferrocyanic acid, alkali metal salts 26062-79-3,
Merquat-100 39421-75-5, Hydroxypropyl guar 80498-15-3, Laccase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oxidative hair dye prepn. comprising
dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
polymer)

IT **9055-15-6, Oxidoreductase**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oxidative hair dye prepn. comprising
dialkyldiallylammonium cyclohomopolymer and quaternary ammonium
polymer)

RN 9055-15-6 HCAPLUS
CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 12 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:703874 HCAPLUS

DN 135:261998

TI **Composition** for oxidative dyeing of keratinic fibers comprising a C20 fatty alcohol and a nonionic **oxyalkylene** surfactant with HLB greater than 5

IN Cottard, Francois; Rondeau, Christine

PA L'Oreal, Fr.

SO Fr. Demande, 64 pp.

CODEN: FRXXBL

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2803196	A1	20010706	FR 1999-16760	19991230
	EP 1142557	A1	20011010	EP 2000-403473	20001211
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 2000006584	A	20010731	BR 2000-6584	20001226
	CN 1308931	A	20010822	CN 2000-137370	20001229
	US 2002010970	A1	20020131	US 2001-750757	20010102
	JP 2001206829	A2	20010731	JP 2001-250	20010104
PRAI	FR 1999-16760	A	19991230		
OS	MARPAT 135:261998				
AB	The title oxidative hair dye prepn. are claimed. An oxidant compn. contained fatty alc. 2.3, ethoxylated fatty alc. 0.6, fatty amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, fragrance q.s., and water q.s. 100 g. A hair dye compn. contained Nafol 20-22 3, Nafolox 20-22 1.35, ethoxylated stearyl alc. 6, oleic acid 2.6, glycol distearate 2, propylene glycol 5, copra acid monoisopropanolamide 2, Aculyn-44 1.4, crosslinked polyacrylic acid 0.6, cationic polymers 3, Merquat-100 0.4, reducing agent 0.7, sequestering agents 0.2, 1,3-dihydroxybenzene 0.6, 1,4-diaminobenzene 0.5, 1-hydroxy-3-aminobenzene 0.1, 1-hydroxy-2-aminobenzene 0.05, 1-hydroxy-4-aminobenzene 0.09, 6-hydroxybenzomorpholine 0.017, 1-.beta.-hydroxyethyloxy-2,4-diaminobenzene dihydrochloride 0.039, propylene glycol monobutyl ether 2.5, monoethanolamine 1.06, 20.5% ammonia 11.1, and water q.s. 100 g. One part of the dye compn. is mixed with 1.5 parts of oxidant compn. and applied on a 90% white hair for 30 min., the hair is then rinsed with water, washed with shampoo, rinsed and dried to obtain a clear chestnut color.				
ST	oxidative hair dye fatty alc surfactant				
IT	Alcohols, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(C18-24; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant)				
IT	Polyurethanes, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(acrylic; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant)				
IT	Bromates				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(alkali metal salts; oxidative hair dye prepn. comprising fatty alc. and nonionic oxyalkylene surfactant)				
IT	Phenols, biological studies				

- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(alkyl, ethoxylated; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Surfactants
(amphoteric; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Polyelectrolytes
Surfactants
(anionic; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Polyelectrolytes
Surfactants
(cationic; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Hair preparations
(dyes, oxidative; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Alcohols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(fatty, ethoxylated; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Surfactants
(nonionic; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Salts, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(of peroxy acids; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT **Coupling agents**
Oxidizing agents
Reducing agents
Surfactants
Thickening agents
(oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Acrylic polymers, biological studies
Enzymes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(polycarboxylic; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Polyurethanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(polyether-; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)
- IT Alkenes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(polymers with maleic anhydride and alkyl maleates; oxidative hair dye prepn. comprising fatty alc. and nonionic **oxyalkylene** surfactant)

IT Quaternary ammonium compounds, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (polymers; oxidative hair dye prepn. comprising fatty alc. and nonionic
oxyalkylene surfactant)

IT Acrylic polymers, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (polyurethane-; oxidative hair dye prepn. comprising fatty alc. and
 nonionic **oxyalkylene** surfactant)

IT Fats and Glyceridic oils, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (vegetable; oxidative hair dye prepn. comprising fatty alc. and
 nonionic **oxyalkylene** surfactant)

IT 79-10-7D, Acrylic acid, polymers with dimethyldiallylammonium salts
 79-10-7D, Acrylic acid, polymers with dimethyldiallylammonium salts
 108-45-2D, 1,3-Benzenediamine, derivs. 110-16-7D, Maleic acid, alkyl
 derivs., polymers with maleic anhydride and olefins 110-86-1D, Pyridine,
 derivs. 124-43-6 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine,
 derivs. 591-27-5D, derivs. 629-98-1, Erucic alcohol 661-19-8,
 Behenic alcohol 7722-84-1, Hydrogen peroxide, biological studies
 9000-30-0D, Guar gum, derivs. 9003-99-0, Peroxidase 9004-34-6D,
 Cellulose, derivs. 9005-00-9, Ethoxylated stearyl alcohol
 9055-15-6, **Oxidoreductase** 17126-47-5D, Ferrocyanic
 acid, alkali metal salts 26062-79-3, Merquat-100 39421-75-5,
 Hydroxypropyl guar 48042-45-1D, salts, polymers with acrylic acid
 80498-15-3, Laccase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye prepn. comprising fatty alc.
 and nonionic **oxyalkylene** surfactant)

IT 9055-15-6, **Oxidoreductase**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye prepn. comprising fatty alc.
 and nonionic **oxyalkylene** surfactant)

RN 9055-15-6 HCAPLUS
 CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 13 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:703873 HCAPLUS

DN 135:231478

TI **Composition** for oxidation dyeing of keratinic fibers, containing
 a thickening polymer comprising at least one fatty chain and a mono- or
 polyglycerol fatty alcohol

IN Cottard, Francois; Rondeau, Christine

PA L'Oreal, Fr.

SO Fr. Demande, 58 pp.

CODEN: FRXXBL

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	FR 2803195	A1	20010706	FR 1999-16757	19991230

EP 1142556 A1 20011010 EP 2000-403471 20001211
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO

BR 2000006588 A 20010731 BR 2000-6588 20001222

CN 1303666 A 20010718 CN 2000-137270 20001229

US 2001023514 A1 20010927 US 2001-750716 20010102

JP 2001206828 A2 20010731 JP 2001-249 20010104

PRAI FR 1999-16757 A 19991230

OS MARPAT 135:231478

AB The title oxidative hair dye prepn. are claimed. An oxidant compn. contained fatty alc. 2.3, ethoxylated fatty alc. 0.6, fatty amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, fragrance q.s., and water q.s. 100 g. A hair dye compn. contained Nafol 20-22 3, a mixt. of polyglycerol C18-24 alcs. 1.35, cetearyl alc. comprising 2 mol of glycerol 4, cetearyl alc. comprising 6 mol of glycerol 2, oleic acid 2.6, glycol distearate 2, propylene glycol 5, copra acid monoisopropanolamide 2, Aculyn-44 1.4, crosslinked polyacrylic acid 0.6, cationic polymers 3, Merquat-100 0.4, reducing agent 0.7, sequestering agents 0.2, 1,3-dihydroxybenzene 0.6, 1,4-diaminobenzene 0.5, 1-hydroxy-3-aminobenzene 0.1, 1-hydroxy-2-aminobenzene 0.05, 1-hydroxy-4-aminobenzene 0.09, 6-hydroxybenzomorpholine 0.017, 1-.beta.-hydroxyethyloxy-2,4-diaminobenzene dihydrochloride 0.039, propylene glycol monobutyl ether 2.5, monoethanolamine 1.06, 20.5% ammonia 11.1, and water q.s. 100 g. One part of the dye compn. is mixed with 1.5 parts of oxidant compn. and applied on a 90% white hair for 30 min., the hair is then rinsed with water, washed with shampoo, rinsed and dried to obtain a clear chestnut color.

ST oxidative hair dye thickening polymer; polyglycerol fatty alc oxidative hair dye

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(C16-18, polyglycerol derivs.; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(C18-24; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)

IT Polyurethanes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(acrylic; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal salts; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)

IT Surfactants

(amphoteric; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)

IT Polyelectrolytes

Surfactants

(anionic; oxidative hair dye prepn. contg. a thickening

- polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Polyelectrolytes
 - Surfactants
 - (cationic; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Hair preparations
 - (dyes, oxidative; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Alcohols, biological studies
 - RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 - (fatty, polyglycerol derivs.; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Surfactants
 - (nonionic; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Salts, biological studies
 - RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 - (of peroxy acids; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Coupling agents
 - Oxidizing agents
 - Reducing agents
 - Surfactants
 - Thickening agents
 - (oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Acrylic polymers, biological studies
 - Enzymes, biological studies
 - RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 - (oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Polyurethanes, biological studies
 - RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 - (polyether-; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Alkenes, biological studies
 - RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 - (polymers with maleic anhydride and alkyl maleates; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Quaternary ammonium compounds, biological studies
 - RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 - (polymers; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)
- IT Acrylic polymers, biological studies
 - RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(polyurethane-; oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)

IT 108-31-6D, Maleic anhydride, polymers with olefins and alkyl maleates
 108-45-2D, 1,3-Benzenediamine, derivs. 110-16-7D, Maleic acid, alkyl
 derivs., polymers with maleic anhydride and olefins 110-86-1D, Pyridine,
 derivs. 124-43-6 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine,
 derivs. 591-27-5D, derivs. 7722-84-1, Hydrogen peroxide, biological
 studies 9000-30-0D, Guar gum, derivs. 9003-99-0, Peroxidase
 9004-34-6D, Cellulose, derivs. 9055-15-6, Oxidoreductase
 17126-47-5D, Ferrocyanic acid, alkali metal salts 25618-55-7D,
 Polyglycerol, fatty alc. derivs. 26062-79-3, Merquat-100 39421-75-5,
 Hydroxypropyl guar 80498-15-3, Laccase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)

IT 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(oxidative hair dye prepn. contg. a thickening polymer comprising at least one fatty chain and a mono- or polyglycerol fatty alc.)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 14 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:703872 HCAPLUS

DN 135:231477

TI **Compositions** for oxidative dyeing of keratinic fibers comprising
 a polymer with an alkyl chain and a C20 fatty alcohol

IN Cottard, Francois; Rondeau, Christine

PA L'Oreal, Fr.

SO Fr. Demande, 58 pp.

CODEN: FRXXBL

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2803197	A1	20010706	FR 1999-16762	19991230
	EP 1142555	A1	20011010	EP 2000-403470	20001211
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 2000006551	A	20010731	BR 2000-6551	20001227
	CN 1303665	A	20010718	CN 2000-137256	20001229
	US 2001023515	A1	20010927	US 2001-750718	20010102
	JP 2001220330	A2	20010814	JP 2001-251	20010104
PRAI	FR 1999-16762	A	19991230		

OS MARPAT 135:231477

AB The title oxidative hair dye prepn. are claimed. An oxidant
 compn. contained fatty alc. 2.3, ethoxylated fatty alc. 0.6, fatty
 amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, fragrance q.s., and water
 q.s. 100 g. A hair dye compn. contained Nafol 20-22 3, Nafolox

20-22 1.35, ethoxylated stearyl alc. 6, oleic acid 2.6, glycol distearate 2, propylene glycol 5, copra acid monoisopropanolamide 2, Aculyn-44 1.4, crosslinked polyacrylic acid 0.6, cationic polymers 3, Merquat-100 0.4, reducing agent 0.7, sequestering agents 0.2, 1,3-dihydroxybenzene 0.6, 1,4-diaminobenzene 0.5, 1-hydroxy-3-aminobenzene 0.1, 1-hydroxy-2-aminobenzene 0.05, 1-hydroxy-4-aminobenzene 0.09, 6-hydroxybenzomorpholine 0.017, 1-.beta.-hydroxyethyloxy-2,4-diaminobenzene dihydrochloride 0.039, propylene glycol monobutyl ether 2.5, monoethanolamine 1.06, 20.5% ammonia 11.1, and water q.s. 100 g. One part of the dye **compn.** is mixed with 1.5 parts of oxidant **compn.** and applied on a 90% white hair for 30 min., the hair is then rinsed with water, washed with shampoo, rinsed and dried to obtain a clear chestnut color.

ST oxidative hair dye polymer fatty alc

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(C18-24; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Polyurethanes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(acrylic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal salts; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Phenols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkyl, ethoxylated; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Surfactants

(amphoteric; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Polyelectrolytes

Surfactants

(anionic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Polyelectrolytes

Surfactants

(cationic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Hair preparations

(dyes, oxidative; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fatty, ethoxylated; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Surfactants

(nonionic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

IT Salts, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(of peroxy acids; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

- IT **Coupling agents**
 Oxidizing agents
 Reducing agents
 Surfactants
 Thickening agents
 (oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT Acrylic polymers, biological studies
 Enzymes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT Carboxylic acids, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (polycarboxylic; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT Polyurethanes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (polyether-; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT Alkenes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (polymers with maleic anhydride and alkyl maleates; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT Quaternary ammonium compounds, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (polymers; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT Acrylic polymers, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (polyurethane-; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT Fats and Glyceridic oils, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (vegetable; oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT 79-10-7D, Acrylic acid, polymers with dimethyldiallylammonium salts
 108-45-2D, 1,3-Benzenediamine, derivs. 110-16-7D, Maleic acid, alkyl derivs., polymers with maleic anhydride and olefins 110-86-1D, Pyridine, derivs. 124-43-6 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs. 591-27-5D, derivs. 629-98-1, Erucic alcohol 661-19-8, Behenic alcohol 7722-84-1, Hydrogen peroxide, biological studies 9000-30-0D, Guar gum, derivs. 9003-99-0, Peroxidase 9004-34-6D, Cellulose, derivs. 9005-00-9, Ethoxylated stearyl alcohol 9055-15-6, **Oxidoreductase** 17126-47-5D, Ferrocyanic acid, alkali metal salts 26062-79-3, Merquat-100 39421-75-5, Hydroxypropyl guar 48042-45-1D, salts, polymers with acrylic acid 80498-15-3, Laccase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)
- IT 9055-15-6, **Oxidoreductase**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye prepn. comprising polymer with alkyl chain and fatty alc.)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 15 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:676561 HCAPLUS

DN 135:246997

TI Oxidation dyeing **composition** for keratinous fibers with a particular paraphenylenediamine derivative and a particular direct dyeing agent

IN Lang, Gerard

PA L'Oreal, Fr.

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001066068	A1	20010913	WO 2001-FR644	20010305
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	FR 2805741	A1	20010907	FR 2000-2862	20000306
PRAI	FR 2000-2862	A	20000306		

OS MARPAT 135:246997

AB The invention concerns an oxidn. dyeing **compn.** for keratinous fibers, and in particular human keratinous fibers such as hair comprising, in a medium suitable for dyeing, at least an oxidn. base selected among certain substituted paraphenylenediamine derivs. and their addn. salts with an acid, and at least a synthetic direct dyeing agent selected among the azo, quinoid, triarylmethane, indoamino, azine dyes and/ or a natural dye. The invention also concerns a dyeing method using said **compn.**

. A hair dye **compn.** contained 1-(4'-amino-3'-methylphenyl)-4-hydroxy-2-methyl-pyrrolidine dihydrochloride 0.837, 2,4-diamino-1-(.beta.-hydroxyethyloxy)-benzene 0.723, Miranol A15 1, and water and excipients q.s. 100 g. Equal amt. of above **compn.** is mixed with 20 vol.

hydrogen peroxide and applied on the hair for 30 min, the hair is then rinsed, washed with a shampoo, rinsed and dried to obtain a blue color.

ST oxidative hair dye paraphenylenediamine direct dye

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal salts; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Polyelectrolytes

Surfactants

(amphoteric; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT **Surfactants**
(anionic; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Polyelectrolytes
Surfactants
(cationic; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Dyes
(direct; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Hair preparations
(dyes, oxidative; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Alcohols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(fatty; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Dyes
(natural; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Surfactants
(nonionic; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Salts, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(of peroxy acids; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Solvents
(org.; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Antioxidants
Azo dyes
Opacifiers
Oxidizing agents
Preservatives
Thickening agents
(oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Acids, biological studies
Alkali metal hydroxides
Ceramides
Cyclosiloxanes
Enzymes, biological studies
Paraffin oils
Peroxysulfates
Polysiloxanes, biological studies
Vitamins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(vegetable; oxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT 359841-61-5
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(edioxidative hair dyes contg. paraphenylenediamine derivs. direct dyes)

IT 72-48-0, Alizarine 81-48-1, solvent violet 13 81-54-9, Purpurin
 82-33-7 83-72-7, Lawsone 85-23-4, Spinulosin 89-25-8 90-15-3,
 .alpha. Naphthol 91-56-5, Isatin 92-31-9, basic blue 17 95-54-5
 95-55-6 95-70-5 95-88-5 106-50-3 108-26-9 108-45-2 108-45-2D,
 1,3-Benzenediamine, derivs. 108-46-3 110-86-1D, Pyridine, derivs.
 116-85-8, disperse red 15 123-30-8 124-43-6 128-95-0, disperse
 violet 1 139-85-5 289-95-2D, Pyrimidine, derivs. 458-37-7, Curcumine
 477-73-6, basic red 2 481-39-0, Juglone 533-31-3, Sesamol 533-31-3D,
 Sesamol, derivs. 548-62-9, basic violet 3 569-77-7, Purpurogallin
 587-98-4, acid yellow 36 591-27-5, 3-Aminophenol 608-25-3 632-99-5,
 basic violet 14 633-03-4, basic green 1 633-96-5, acid orange 7
 1151-98-0, Apigenidin 1220-94-6, disperse violet 4 1260-17-9, Carminic
 acid 1320-07-6, acid orange 24 1694-09-3, acid violet 49 1934-21-0,
 acid yellow 23 2380-86-1, 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol
 2390-60-5, basic blue 7 2475-45-8, disperse blue 1 2475-46-9, disperse
 blue 3 2580-56-5, basic blue 26 2650-18-2, acid blue 9 2706-28-7,
 acid yellow 9 2835-95-2, 2-Methyl-5-aminophenol 2872-48-2, disperse
 red 11 3179-90-6, disperse blue 7 3486-30-4, acid blue 7 3567-66-6,
 acid red 33 4368-56-3, acid blue 62 4430-18-6, acid violet 43
 4664-16-8 4770-37-0 5735-53-5D, Benzomorpholine, derivs. 6441-93-6
 7469-77-4 7556-37-8 7575-35-1 7722-84-1, Hydrogen peroxide,
 biological studies 9003-99-0, Peroxidase 9055-15-6,
Oxidoreductase 12217-41-3, basic blue 22 12221-52-2, basic red
 22 13556-29-1 18499-92-8, Kermesic acid 20721-50-0, disperse black 9
 22036-97-1 22366-99-0 23946-41-0 26381-41-9, basic brown 16
 36118-45-3D, Pyrazoline, derivs. 47569-30-2 52136-23-9 52136-25-1
 55302-96-0 66422-95-5 68123-13-7, basic blue 99 68391-30-0, basic
 red 76 68391-31-1, basic yellow 57 68651-46-7, Indigo (dye)
 69151-32-2 70643-19-5 80498-15-3, Laccase 83763-47-7 93841-24-8
 99788-75-7 143525-61-5 143525-64-8 154442-49-6 171662-44-5
 171662-53-6 176742-32-8, basic brown 17 200346-04-9 200346-06-1
 200346-16-3 204700-85-6 227617-43-8 228268-53-9 228268-59-5
 228268-69-7 228268-74-4 228268-76-6 228268-85-7 228268-87-9
 228555-69-9 228555-73-5 228555-75-7 228555-77-9 228555-79-1
 228555-81-5 228569-19-5 228569-22-0 228569-31-1 228569-39-9
 228569-43-5 228569-47-9 228569-56-0 342013-25-6 359840-68-9
 359840-69-0 359840-70-3 359840-71-4 359840-72-5 359840-73-6
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 359840-99-6 359841-00-2 359841-01-3 359841-02-4 359841-03-5
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 359841-39-7 359841-40-0 359841-41-1 359841-42-2 359841-43-3
 359841-44-4 359841-45-5 359841-46-6 359841-47-7 359841-48-8
 359841-49-9 359841-50-2 359841-51-3 359841-52-4 359841-53-5
 359841-54-6 359841-55-7 359841-56-8 359841-57-9 359841-58-0
 359841-59-1 359841-60-4 359841-62-6 359841-63-7 359841-64-8
 359841-65-9 359841-66-0 359841-67-1 359841-68-2 359841-69-3
 359850-56-9 359868-06-7 360069-60-9

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dyes contg. paraphenylenediamine
derivs. direct dyes)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; JP 11158048 A 1999 HCAPLUS
- (2) Anon; PATENT ABSTRACTS OF JAPAN 1999, V1999(11)
- (3) Fuji Photo Film Co Ltd; JP 11158048 A 1999 HCAPLUS
- (4) Henkel Kgaa; DE 19707545 A 1998 HCAPLUS
- (5) Oreal; EP 0673641 A 1995 HCAPLUS
- (6) Schwarzkopf Gmbh Hans; DE 19728335 A 1998 HCAPLUS
- (7) Squibb Bristol Myers Co; EP 0962452 A 1999 HCAPLUS

IT 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dyes contg. paraphenylenediamine
derivs. direct dyes)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 16 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:654637 HCAPLUS

DN 135:215749

TI Keratin fiber dye compositions containing indolizine cationic
derivatives as coupling agents

IN Breton, Philippe; Segala, Fabienne; Lagrange, Alain

PA L'oreal, Fr.

SO Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DT Patent

LA French

IC A61K007-13; C07D471-04

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 27

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1129690	A2	20010905	EP 2001-400430	20010219
	EP 1129690	A3	20011128		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2805460	A1	20010831	FR 2000-2419	20000225
	JP 2001270813	A2	20011002	JP 2001-51270	20010226
	US 2001044974	A1	20011129	US 2001-791822	20010226
PRAI	FR 2000-2419	A	20000225		

OS MARPAT 135:215749

AB The title oxidative hair dye compns. are disclosed. Thus,
7-methyl-2-phenyl-3-(2-pyridin-2-yl-ethyl)-indolizine was refluxed with
di-Me sulfate in Et acetate for 2 h to obtain 1-methyl-2-[2-(7-methyl-2-
phenyl-indolizin-3-yl)-ethyl]-pyridinium (I). A hair dye compn.
contained I 3x10⁻³, paratoluylenediamine 3x10⁻³ mole, water and excipients
q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol.
hydrogen peroxide and applied on the hair for 30 min. The hair is then
rinsed with water, washed with shampoo and dried to obtain a golden blond
color.

ST oxidative hair dye indolizine deriv coupler

IT Bromates

- RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (alkali metal salts; keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents)
- IT Hair preparations
 (dyes, oxidative; keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents)
- IT Coupling agents
 Oxidizing agents
 (keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents)
- IT Enzymes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents)
- IT Salts, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (of peroxy acids; keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents)
- IT 92-65-9 93-05-0, N,N-Diethyl p-phenylenediamine 95-55-6, 2 aminophenol 95-55-6D, derivs. 95-70-5 99-98-9, N,N-Dimethyl p-phenylenediamine 101-54-2 106-50-3, 1,4-Benzenediamine, biological studies 106-50-3D, 1,4-Benzenediamine, derivs. 108-45-2D, 1,3-Benzenediamine, derivs. 123-30-8, p-Aminophenol 123-30-8D, derivs. 124-43-6 148-71-0, 4-Amino-N,N-diethyl-3-methyl aniline 399-95-1, 4-Amino 3-fluorophenol 399-96-2, 4 amino 2 fluorophenol 537-65-5 591-27-5D, derivs. 615-66-7, 2-Chloro-p-phenylenediamine 1630-11-1, 2,6-Diethyl p-phenylenediamine 2359-52-6 2359-53-7 2835-96-3, 4-amino 2 methylphenol 2835-98-5, 2 amino 5-methylphenol 2835-99-6, 4 amino 3 methylphenol 5306-96-7, 2,3-Dimethyl-p-phenylenediamine 5862-80-6 6393-01-7, 2,5-Dimethyl p-phenylenediamine 7218-02-2, 2,6-Dimethyl p-phenylenediamine 7575-35-1, N,N-Bis(.beta.-hydroxyethyl) p-phenylenediamine 7722-84-1, Hydrogen peroxide, biological studies 9002-10-2, Tyrosinase 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase 14791-78-7, 2-Fluoro p-phenylenediamine 15583-11-6 15583-12-7 17672-22-9, 2 amino 6-methylphenol 35682-64-5 35682-65-6 35691-87-3 35691-91-9 47139-07-1 47581-03-3 52200-90-5, 4-amino 2 methoxyphenol 63969-43-7 73793-80-3, 2-Hydroxymethyl p-phenylenediamine 79352-72-0, 4-amino 2 aminomethylphenol 80467-77-2, N-(2-Hydroxypropyl) p-phenylenediamine 80498-15-3, Laccase 93841-24-8, 2-.beta.-Hydroxyethyl p-phenylenediamine 97902-52-8, 2-Isopropyl p-phenylenediamine 104333-09-7, 4-Amino 2-hydroxymethylphenol 105293-89-8, N,N-Dipropyl p-phenylenediamine 105607-68-9 110952-46-0, 4-Amino 2-(2-hydroxyethylaminomethyl)phenol 128729-30-6 128729-31-7 129697-50-3, 5-acetamido 2 aminophenol 130582-53-5 135855-34-4 135855-35-5 168202-61-7, 4 amino 3 hydroxymethylphenol 189261-56-1 221110-58-3 358359-11-2 358359-13-4 358359-14-5 358359-15-6 358359-16-7 358359-17-8 358359-18-9 358359-19-0 358359-20-3 358359-21-4 358359-22-5 358359-23-6 358359-24-7 358359-25-8 358359-26-9 358359-27-0 358359-28-1 358359-29-2 358359-30-5 358359-31-6
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (keratin fiber dye compns. contg. indolizine cationic derivs. as coupling agents)
- IT 358359-09-8P 358359-10-1P
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(keratin fiber dye **compns.** contg. indolizine cationic derivs.
as **coupling** agents)

IT 77-78-1, Dimethylsulfate 79-04-9, Chloroacetic acid chloride 616-47-7,
n Methylimidazole 768-18-3, 2 methylindolizine 1337-81-1, Vinyl
pyridine 26557-56-2, 7-Methyl-2-phenyl-indolizine
RL: RCT (Reactant)
(keratin fiber dye **compns.** contg. indolizine cationic derivs.
as **coupling** agents)

IT 358359-08-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(keratin fiber dye **compns.** contg. indolizine cationic derivs.
as **coupling** agents)

IT 9002-10-2, Tyrosinase 9055-15-6, **Oxidoreductase**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(keratin fiber dye **compns.** contg.
indolizine cationic derivs. as **coupling** agents)

RN 9002-10-2 HCAPLUS
CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS
CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 17 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:654636 HCAPLUS
DN 135:215748
TI Keratinous fiber dyeing **composition** comprising
N-(2-hydroxybenzene)carbamate or N-(2-hydroxybenzene)urea derivatives as
coupling agents
IN Saunier, Jean-Baptiste; Vidal, Laurent
PA L'oreal, Fr.
SO Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DT Patent
LA French
IC ICM A61K007-13
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1129689	A2	20010905	EP 2001-400429	20010219
	EP 1129689	A3	20011121		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2805159	A1	20010824	FR 2000-2335	20000223
	JP 2001270814	A2	20011002	JP 2001-49456	20010223
	US 2001034914	A1	20011101	US 2001-790524	20010223
PRAI	FR 2000-2335	A	20000223		
OS	MARPAT 135:215748				
AB	The title hair dye compns. are disclosed. A hair dye compn. contained para-aminophenol 0.73, (2-hydroxy-4- aminophenyl)carbamate Et ester 1.31, water and excipients q.s. 100 g. Equal amt. of the compn. is mixed with 20 vol. hydrogen peroxide and applied on the hair for 30 min. The hair is then rinsed with water, washed with shampoo and dried to obtain copper blond color.				
ST	hair dye hydroxybenzene carbamate deriv coupler ; urea hydroxybenzene deriv hair dye coupling agent				

- IT Bromates
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (alkali metal salts; keratinous fiber dyeing **compn.** comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as **coupling agents**)
- IT Hair preparations
 (dyes, oxidative; keratinous fiber dyeing **compn.** comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as **coupling agents**)
- IT Coupling agents
 (keratinous fiber dyeing **compn.** comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as **coupling agents**)
- IT Enzymes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (keratinous fiber dyeing **compn.** comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as **coupling agents**)
- IT Salts, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (of peroxy acids; keratinous fiber dyeing **compn.** comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as **coupling agents**)
- IT 92-65-9 93-05-0 95-55-6, 2-Aminophenol 95-70-5 99-98-9 101-54-2
 106-50-3 108-45-2D, 1,3-Benzenediamine, derivs. 123-30-8 124-43-6
 148-71-0 399-95-1, 4 amino 3 fluoro phenol 399-96-2, 4 amino
 2-fluorophenol 537-65-5 591-27-5D, derivs. 615-66-7 1196-72-1
 1630-11-1 2359-52-6 2359-53-7 2656-22-6 2811-27-0 2835-96-3, 4
 amino 2 methyl phenol 2835-98-5, 2-Amino 5-methylphenol 2835-99-6, 4
 amino 3 methyl phenol 5306-96-7 5862-80-6 6393-01-7 7218-02-2
 7575-35-1 7722-84-1, Hydrogen peroxide, biological studies
 9002-10-2, tyrosinase 9003-99-0, peroxidase 9055-15-6,
 Oxidoreductase 14791-78-7 17672-22-9, 2-Amino 6-methylphenol
 19298-14-7 24918-69-2 27898-06-2 28096-25-5 29785-47-5, 4 amino 2
 methoxymethyl phenol 34542-96-6 38910-17-7 40783-78-6 42953-11-7
 54381-16-7 55446-28-1 56021-27-3 56836-51-2 57718-28-2
 63969-43-7 73793-80-3 79352-72-0, 4 amino 2 aminomethyl phenol
 80467-77-2 80498-15-3, laccase 83898-17-3 90661-81-7 97902-52-8
 104333-09-7, 4 amino 2 hydroxymethyl phenol 105293-89-8 105607-68-9
 110952-46-0 119838-00-5 119838-04-9 121238-42-4 126335-43-1
 128729-30-6 128729-31-7 129697-50-3, 5-Acetamido-2-aminophenol
 130582-53-5 135855-34-4 135855-35-5 168202-61-7, 4 amino 3
 hydroxymethyl phenol 201599-07-7 207568-58-9 221110-58-3
 221110-59-4 232284-09-2 357272-85-6 357272-86-7 357272-87-8
 357272-88-9 357272-89-0 357272-91-4 357272-92-5 357272-93-6
 357272-94-7 357272-95-8 357272-96-9 357272-97-0 357272-98-1
 357272-99-2 357273-00-8 357273-01-9 357273-02-0 357273-03-1
 357273-04-2 357273-05-3 357273-07-5 357273-08-6 357273-09-7
 357273-10-0 357273-11-1 357273-12-2 357273-13-3 357273-14-4
 357273-15-5 357273-16-6 357273-18-8 357273-20-2 357273-22-4
 357273-26-8 357273-28-0 357273-30-4 357273-31-5 357273-32-6
 357273-33-7 357273-34-8 357273-35-9 357273-36-0 357273-37-1
 357273-38-2 357273-39-3 357273-40-6 357273-41-7 357273-42-8
 357273-43-9 357273-44-0 357273-45-1 357273-46-2 357273-47-3
 357273-48-4 357273-49-5 357273-51-9 357273-53-1 357273-54-2
 357273-55-3 357273-56-4 357273-57-5 357273-58-6 357273-59-7
 357273-60-0 357273-61-1 357273-62-2 357273-63-3 357273-64-4
 357273-65-5 357273-66-6 357273-67-7 357273-68-8 357273-69-9
 357273-70-2 357273-71-3 357273-72-4 357273-74-6 357273-75-7

357273-76-8 357273-77-9 357273-78-0 357273-79-1 357273-80-4
 357273-81-5 357273-82-6 357273-83-7 357273-84-8 357273-85-9
 357273-86-0 357273-87-1 357273-88-2 357273-89-3 357273-90-6
 357273-91-7 357273-92-8 357273-93-9 357273-94-0 357273-95-1
 357273-96-2 357273-97-3 357273-98-4 357273-99-5 357274-00-1
 357274-01-2 357274-02-3 357274-03-4 357274-04-5 357274-05-6
 357274-06-7 357274-07-8 357274-08-9 357274-09-0 357274-10-3
 357274-11-4 357274-12-5 357274-14-7 357274-15-8 357274-16-9
 357274-17-0 357274-18-1 357274-19-2 357274-20-5 357274-21-6
 357274-23-8 357274-24-9 357274-25-0 357274-26-1 357274-27-2
 357274-28-3 357274-29-4 357274-30-7 357274-31-8 357274-32-9
 357274-33-0 357274-34-1 357276-31-4 357276-32-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(keratinous fiber dyeing compn.

comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as
 coupling agents)

IT 9002-10-2, tyrosinase 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(keratinous fiber dyeing compn.

comprising hydroxybenzene carbamate or hydroxybenzene urea derivs. as
 coupling agents)

RN 9002-10-2 HCAPLUS

CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 18 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:489203 HCAPLUS

DN 135:81834

TI One-pack type post-foamable oxidation hair-dye compositions

IN Tsujino, Yoshio; Aoki, Masahiro

PA Yamahatsu Sangyo Kaisha, Ltd., Japan

SO PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001047487	A1	20010705	WO 1999-JP7273	19991224
	W:				
	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,				
	CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,				
	IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,				
	MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,				
	SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,				
	BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,				
	DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				
	CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

AB Disclosed are one-pack type post-foamable oxidn. hair-dye compns
 . characterized by contg. uricase, uric acid, an oxidn. dye and
 a post-foaming agent. These compns. impart an excellent feel in

using, achieve good performance and exert an excellent hair-dyeing effect. A hair dye compn. contained p-phenylenediamine 0.6, p-methylaminophenol sulfate 0.3, 2,4-diaminophenoxyethanol hydrochloride 0.05, p-aminophenol 0.1, 5-amino-o-cresol 0.05, resorcinol 0.5, N-acetyl-L-cysteine 0.08, alkyl acrylate copolymer 2.5, sorbitol 3, polyoxyethylene dimethylglucoside 1, coco fatty acid polypeptide reaction products 1, monoethanolamine q.s. to pH 9.2, uricase (20 IU/mg) 1, isopentane 0.5, and distd. water q.s. to 100 %.

ST hair dye uricase urate org solvent

IT Hair preparations

(dyes, oxidative; one-pack post-foamable oxidn. hair dyes contg. uricase and urate and org. solvents)

IT 69-93-2, Uric acid, biological studies 74-98-6, Propane, biological studies 75-28-5, Isobutane 78-78-4, Isopentane 106-97-8, Butane, biological studies 109-66-0, Pentane, biological studies 115-10-6, Dimethyl ether 9002-12-4, Uricase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(one-pack post-foamable oxidn. hair dyes contg. uricase and urate and org. solvents)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Koike Kagaku K K; JP 10316532 A 1998 HCAPLUS
- (2) Kyowa Hakko Kogyo Kabushikigaisha; US 4961925 A HCAPLUS
- (3) Kyowa Hakko Kogyo Kabushikigaisha; JP 63246313 A HCAPLUS
- (4) Kyowa Hakko Kogyo Kabushikigaisha; WO 8807360 A1 HCAPLUS
- (5) Kyowa Hakko Kogyo Kabushikigaisha; EP 310675 A1 1989 HCAPLUS
- (6) Mandom Corp; JP 977629 A 1997
- (7) Mandom Corp; JP 977630 A 1997
- (8) Novo Nordisk; WO 9915137 A1 1999 HCAPLUS
- (9) Yamahatsu Sangyo Kaisha Ltd; JP 08217652 A HCAPLUS
- (10) Yamahatsu Sangyo Kaisha Ltd; JP 10298027 A HCAPLUS
- (11) Yamahatsu Sangyo Kaisha Ltd; CN 1132623 A HCAPLUS
- (12) Yamahatsu Sangyo Kaisha Ltd; CN 1200264 A HCAPLUS
- (13) Yamahatsu Sangyo Kaisha Ltd; CA 2150596 A HCAPLUS
- (14) Yamahatsu Sangyo Kaisha Ltd; US 6027719 A HCAPLUS
- (15) Yamahatsu Sangyo Kaisha Ltd; AU 6194998 A1
- (16) Yamahatsu Sangyo Kaisha Ltd; AU 9536624 A1 HCAPLUS
- (17) Yamahatsu Sangyo Kaisha Ltd; EP 716846 A1 1996 HCAPLUS
- (18) Yamahatsu Sangyo Kaisha Ltd; EP 875241 A2 1998 HCAPLUS

IT 9002-12-4, Uricase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(one-pack post-foamable oxidn. hair dyes contg. uricase and urate and org. solvents)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 19 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:472447 HCAPLUS

DN 135:66017

TI Hair dye aerosol compositions containing water-soluble polymers

IN Noguchi, Mutsumi; Onuki, Takeshi; Mitamura, Joji

PA Lion Corporation, Japan

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001045656	A1	20010628	WO 2000-JP8987	20001219
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	JP 2001172142	A2	20010626	JP 1999-360313	19991220
	JP 2001240520	A2	20010904	JP 2000-385014	20001219
PRAI	JP 1999-360313	A	19991220		
	JP 1999-360797	A	19991220		
OS	MARPAT 135:66017				
AB	Disclosed is a one-pack aerosol-type hair dye compn. contg. an oxidn. dye and an oxidizing enzyme, characterized by further contg. at least one water-sol. polymer selected from among hydroxypropyl cellulose, CM-cellulose, xanthan gum, guar gum, locust bean gum, gum arabic, tragacanth gum, karaya gum, gellan gum, pectin, carrageenan, furcellaran, alginic acid and salts thereof, hyaluronic acid and salts thereof, chondroitin sulfate and salts thereof, ethylene oxide polymers, polyacrylic acid and salts thereof, acrylic acid copolymers and salts thereof, polyvinylpyrrolidone, vinylpyrrolidone copolymers, polyvinyl acetate, vinyl acetate copolymers and carboxyvinyl polymers. A hair dye aerosol compn. contg. p-phenylenediamine 1.5, p-aminophenol 0.1, methaphenylenediamine 0.15, hydroxypropyl cellulose (Niso HPC) 5, ethanol 5, lactic acid 0.5, oleic acid 0.1, sodium polyoxyethylene lauryl ether sulfate 0.2, laccase 0.3, monoethanol amine and water q.s. to 100 % was prepd.				
ST	hair dye aerosol water sol polymer				
IT	Surfactants (Amides; hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes and amide surfactants)				
IT	Vinyl compounds, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (carboxy-contg., polymers; hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes)				
IT	Hair preparations (dyes; hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes)				
IT	Polyoxyalkylenes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes)				
IT	Amides, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (surfactants; hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes and amide surfactants)				
IT	Polymers, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				

(water-sol.; hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes)

IT 75-21-8D, Ethylene oxide, polymers 79-10-7, Acrylic acid, biological studies 88-12-0D, copolymers 108-05-4D, Vinyl acetate, copolymers 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-21-9, Furcellaran 9000-30-0, Guar gum 9000-36-6, Karaya gum 9000-40-2, Locust bean gum 9000-65-1, Tragacanth gum 9000-69-5, Pectin 9002-12-4, Uricase 9003-01-4, Polyacrylic acid 9003-04-7, Aronvis S 9003-20-7, Polyvinyl acetate 9003-39-8, luviskol K90 9003-99-0, Peroxidase 9004-32-4, CM-cellulose 9004-61-9, Hyaluronic acid 9004-64-2, Nisso HPC 9005-32-7, Alginic acid 9007-28-7, Chondroitin sulfate 11138-66-2, Xanthan gum 25322-68-3, polyox WSR-303 71010-52-1, Gellan gum 80498-15-3, Laccase 96827-24-6, carbopol 1342
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes)

IT 137-16-6, N-Lauroyl-sarcosine sodium salt 16693-53-1, N-Lauroyl-sarcosine triethanolamine salt 21539-58-2, N-Lauroyl-N-methyl-.beta.-alanine sodium salt 61538-73-6, N-Lauroyl-.beta.-alanine triethanolamine salt 89353-55-9, N-Lauroyl-N-methyl-.beta.-alanine triethanolamine salt
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes and amide surfactants)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Lion Corporation; JP 1160454 A
- (2) Lion Corporation; EP 958806 A1 HCAPLUS
- (3) Lion Corporation; WO 9856335 A1 1998 HCAPLUS
- (4) Yamahatsu Sangyo K K; JP 08217652 A HCAPLUS
- (5) Yamahatsu Sangyo K K; CN 1132623 A HCAPLUS
- (6) Yamahatsu Sangyo K K; CA 2150596 A HCAPLUS
- (7) Yamahatsu Sangyo K K; AU 9536624 A1 HCAPLUS
- (8) Yamahatsu Sangyo K K; EP 716846 A1 1996 HCAPLUS

IT 9002-12-4, Uricase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye aerosol compns. contg. water-sol. polymers and oxidizing enzymes)

RN 9002-12-4 HCAPLUS
CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 20 OF 53 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:865148 HCAPLUS
DN 134:32767
TI **Composition** for oxidative dyeing of keratinous fibers comprising oxidation base and an oxido-reductase enzyme
IN Plos, Gregory; Kravtchenko, Sylvain
PA L'oreal, Fr.
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA French
IC ICM A61K007-13
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1057471	A1	20001206	EP 2000-401362	20000518
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2794365	A1	20001208	FR 1999-7092	19990604
	JP 2001031538	A2	20010206	JP 2000-166125	20000602
PRAI	FR 1999-7092	A	19990604		
OS	MARPAT 134:32767				
AB	An oxidative hair dye prepn. contg. an oxidn. base and an oxido-reductase enzyme is disclosed (Markush structures given). A hair dye prepn. contained D-alanine oxidase 2000 U, para-phenylenediamine 0.324, 1-amino-2-methoxy-4,5-methylenedioxy benzene 0.611, D-alanine 0.535, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 g. The compn. produced a dull golden color.				
ST	oxidative hair dye base oxidoreductase enzyme				
IT	Coupling agents (compn. for oxidative dyeing of keratinous fibers comprising oxidn. base and oxido-reductase enzyme)				
IT	Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (compn. for oxidative dyeing of keratinous fibers comprising oxidn. base and oxido-reductase enzyme)				
IT	Hair preparations (dyes, oxidative; compn. for oxidative dyeing of keratinous fibers comprising oxidn. base and oxido-reductase enzyme)				
IT	89-25-8 90-15-3, .alpha.-Naphthol 92-65-9 93-05-0 95-55-6, 2-Aminophenol 95-55-6D, O-Aminophenol, derivs. 95-70-5 95-88-5, 4-Chlorol,3-Dihydroxybenzene 99-98-9 101-54-2 106-50-3, 1,4-Benzenediamine, biological studies 106-50-3D, 1,4-Benzenediamine, derivs. 108-26-9 108-45-2, 1,3-Diamino benzene, biological studies 108-46-3, 1,3-Dihydroxybenzene, biological studies 110-86-1D, Pyridine, derivs., biological studies 123-30-8D, p-Aminophenol, derivs. 148-71-0 289-95-2D, Pyrimidine, derivs. 338-69-2, D-Alanine 399-95-1, 4-Amino-3-fluorophenol 399-96-2 533-31-3, Sesamol 537-65-5 591-27-5, 3-Aminophenol 608-25-3 615-66-7, 2-Chloro-p-phenylenediamine 1630-11-1 2359-52-6 2359-53-7 2380-86-1, 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol 2835-95-2, 2-Methyl 5-aminophenol 2835-96-3, 4-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 4664-16-8 4770-37-0, 6-Hydroxyindoline 5306-96-7, 2,3-Dimethyl-p-phenylenediamine 5862-80-6 6393-01-7				
IT	74-88-4, reactions 97-60-9 100-35-6 106-58-1, 1,4-Dimethylpiperazine 108-24-7, Acetic anhydride 7647-01-0, Hydrochloric acid, reactions RL: RCT (Reactant) (oxidative hair dye compns. contg. cationic coupling agent)				
IT	109-70-6P, 1-Bromo-3-chloropropane 79858-72-3P 79873-86-2P 244779-73-5P 244779-74-6P 244779-76-8P 244779-77-9P 244779-78-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (oxidative hair dye compns. contg. cationic coupling agent)				
RE.CNT	4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD				
RE					
	(1) Farbenfabriken Bayer Ag; BE 639047 A HCAPLUS				
	(2) Nippon Rinsho Kagakkai; RINSHO KAGAKU 1987, V16(2), P106				
	(3) Ohsawa, S; Application of new synthetic substrate for estimation of serum cholinesterase activity Measurement of pseudo-ChE activity using the new				

substrate (3-4-dihydroxybenzoylcholine) 1988, 5, HCAPLUS

(4) Oreal; FR 2520358 A 1983 HCAPLUS

IT 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg. cationic coupling agent)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 29 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:464164 HCAPLUS

DN 131:120589

TI Hair dye composition containing a laccase

IN Lang, Gerard; Cotteret, Jean

PA L'Oreal, Fr.

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9936035	A1	19990722	WO 1998-FR2794	19981218
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	FR 2773477	A1	19990716	FR 1998-254	19980113
	FR 2773477	B1	20010223		
	AU 9917666	A1	19990802	AU 1999-17666	19981218
	AU 729022	B2	20010125		
	BR 9814740	A	20001017	BR 1998-14740	19981218
	EP 1047377	A1	20001102	EP 1998-962518	19981218
	EP 1047377	B1	20010627		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	AT 202469	E	20010715	AT 1998-962518	19981218
	ES 2161074	T3	20011116	ES 1998-962518	19981218
PRAI	FR 1998-254	A	19980113		
	WO 1998-FR2794	W	19981218		

AB The invention concerns a ready-to-use compn. for dyeing human keratinous fibers and more particularly human hair, comprising (a) at least an enzyme such as laccase; (b) at least a cationic substance or particular amphoteric polymer; (c) at least an oxidn. coloring agent, as well as the dyeing methods using said compn.

ST hair dye laccase formulation

IT Polysiloxanes, biological studies

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(3-[(2-aminoethyl)amino]-2-methylpropyl Me, di-Me; hair dye

- compn. contg. a laccase)**
- IT Polysiloxanes, biological studies
 - RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 - ([(aminoethyl)amino]propyl hydroxy, di-Me; hair dye **compn. contg. a laccase)**
- IT Polysiloxanes, biological studies
 - RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 - (cationic; hair dye **compn. contg. a laccase)**
- IT Polymers, biological studies
 - RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 - (co-, dimethyldiallylammonium halide; hair dye **compn. contg. a laccase)**
- IT Hair preparations
 - (dyes; hair dye **compn. contg. a laccase)**
- IT Oxidation
 - (enzymic; hair dye **compn. contg. a laccase)**
- IT Antioxidants
 - Buffers
 - Coupling agents**
 - Dispersing agents
 - Opacifiers
 - Perfumes
 - Permeation enhancers
 - Preservatives
 - Sequestering agents
 - Surfactants
 - Thickening agents
 - (hair dye **compn. contg. a laccase)**
- IT Enzymes, biological studies
 - RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 - (hair dye **compn. contg. a laccase)**
- IT Keratins
 - RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
 - (hair dye **compn. contg. a laccase)**
- IT Paraffin oils
 - Polymers, biological studies
 - Vitamins
 - RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
 - (hair dye **compn. contg. a laccase)**
- IT Chlorophylls, biological studies
 - RL: MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
 - (laccases of plants producing; hair dye **compn. contg. a laccase)**
- IT Agaricus bisporus
 - Anacardiaceae
 - Apple
 - Aspergillus nidulans
 - Avocado (Persea americana)
 - Banana (Musa)

Botrytis cinerea
 Carrot
 Catharanthus roseus
 Ceriporiopsis subvermispora
 Cerrena unicolor
 Chaetomium thermophilum
 Cladosporium cladosporioides
 Coffee (Coffea)
 Coprinus cinereus
 Dichomitus squalens
 Fomes fomentarius
 Ganoderma lucidum
 Ginkgo biloba
 Glomerella cingulata
 Heterobasidion annosum
 Horse chestnut (Aesculus)
 Iris (plant)
 Lacquer tree
 Lactarius piperatus
 Maple (Acer pseudoplatanus)
 Monotropa hypopitys
 Myceliophthora thermophila
 Neurospora crassa
 Panaeolus papilionaceus
 Panaeolus sphinctrinus
 Peach (Prunus persica)
 Phellinus noxius
 Pistacia palaestina
 Pleurotus ostreatus
 Podocarpaceae
 Podospora anserina
 Polyporus pinsitus
 Potato (Solanum tuberosum)
 Pyricularia oryzae
 Rhizoctonia solani
 Rigidoporus lignosus
 Rosemary
 Russula delica
 Schizophyllum commune
 Scytalidium
 Thelephora terrestris
 Trametes hirsuta
 Trametes versicolor
 Vinca minor

(laccases of; hair dye **compn.** contg.. a laccase)

IT Solvents

(org.; hair dye **compn.** contg. a laccase)

IT 2835-95-2, 2-Methyl 5-aminophenol

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
 (Physical, engineering or chemical process); BIOL (Biological study); PROC
 (Process); USES (Uses)

(**coupling** agent; hair dye **compn.** contg. a laccase)

IT 26161-33-1, Poly(methacryloyloxyethyltrimethylammonium chloride)
35429-19-7

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
 chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(cross-linked; hair dye **compn.** contg. a laccase)

IT 9003-99-0, Peroxidase 9055-15-6, **Oxidoreductase**

RL: BAC (Biological activity or effector, except adverse); BUU (Biological
 use, unclassified); NUU (Other use, unclassified); PEP (Physical,

engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(hair dye compn. contg. a laccase)

IT 80498-15-3, Laccase

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(hair dye compn. contg. a laccase)

IT 88-12-0D, polymeric derivs. 89-25-8 90-15-3, .alpha.-Naphthol
95-54-5D, 1,2-Benzenediamine, derivs. 95-55-6D, derivs. 95-88-5,
4-Chloro-1,3-dihydroxybenzene 106-50-3D, 1,4-Benzenediamine, derivs.
108-26-9 108-45-2, 1,3-Benzenediamine, biological studies 108-45-2D,
1,3-Benzenediamine, derivs. 108-46-3, 1,3-Dihydroxybenzene, biological
studies 108-46-3D, 1,3-Benzenediol, derivs. 123-30-8D, derivs.
533-31-3, Sesamol 591-27-5, 3-Aminophenol 591-27-5D, derivs.
608-25-3, 1,3-Dihydroxy-2-methylbenzene 2380-86-1, 6-Hydroxyindole
4664-16-8, 2,6-Dihydroxy-4-methylpyridine 53694-17-0, Merquat 280
55302-96-0 66422-95-5, 2,4-Diaminophenoxyethanol dihydrochloride
70643-19-5 81892-72-0 83763-47-7 93846-05-0 197179-33-2, Oramix
CG110 231958-91-1

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(hair dye compn. contg. a laccase)

IT 88-12-0D, cationic copolymers 26590-05-6, Acrylamide-
diallyldimethylammonium chloride copolymer 57564-45-1 98616-25-2,
Polyquaternium-24 223104-80-1

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(hair dye compn. contg. a laccase)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Oreal; EP 0557203 A 1993 HCAPLUS
- (2) Oreal; FR 2694018 A 1994 HCAPLUS
- (3) Oreal; EP 0673641 A 1995 HCAPLUS
- (4) Perma Sa; EP 0504005 A 1992 HCAPLUS

IT 9055-15-6, Oxidoreductase

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(hair dye compn. contg. a laccase)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 30 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:401531 HCAPLUS

DN 131:49211

TI Oxidative hair dye preparations containing pyrazolo-azole derivatives

IN Vidal, Laurent; Maubru, Mireille

PA L'oreal, Fr.

SO Eur. Pat. Appl., 39 pp.

CODEN: EPXXDW

DT Patent

LA French

IC ICM A61K007-13

ICS C07D487-04

ICI C07D487-04, C07D249-00, C07D231-00; C07D487-04, C07D257-00, C07D231-00;

C07D487-04, C07D235-00, C07D231-00; C07D487-04, C07D231-00, C07D231-00
 CC 62-4 (Essential Oils and Cosmetics)
 Section cross-reference(s): 28

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 923929	A1	19990623	EP 1998-402939	19981125
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2772379	A1	19990618	FR 1997-15947	19971216
	FR 2772379	B1	20000211		
	JP 11263790	A2	19990928	JP 1998-356792	19981215
	JP 3135536	B2	20010219		
	US 2002007520	A1	20020124	US 1998-212578	19981216
PRAI	FR 1997-15947	A	19971216		
OS	MARPAT 131:49211				
AB	The title compds. are prepd. for use in oxidative hair dye compns. Thus, 1H-7-amino-3,6-dimethylpyrazolo[3,2-c]-1,2,4-triazole dihydrochloride (I) was prepd. by hydrogenation of 1H-7-nitro-3,6-dimethylpyrazolo[3,2-c]-1,2,4-triazole over Pd/C in presence of a soln. of ethanolic HCl. A hair dye prepn. contained I 0.672, resorcin 0.330, benzylic acid 2, PEG 3, ethanol 18, Oramix CG110 6, 20% ammonia 10, sodium metabisulfite 0.208, sequestrant q.s. and water q.s. 100 g. At the time of use the prepn. is mixed with equal amt. of 6.10-3 mol% ammonium persulfate and applied on the hair for 30 min. The hair is then rinsed, washed with a shampoo, and dried to obtain an iris color.				
ST	oxidative hair dye pyrazoloazole deriv				
IT	Salts, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(of peroxy acids; oxidative hair dye preps. contg. pyrazolo-azole derivs.)				
IT	Coupling agents				
	(oxidative hair dye preps. contg. pyrazolo-azole derivs.)				
IT	108-46-3D, 1,3-Benzenediol, derivs.				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(meta-; oxidative hair dye preps. contg. pyrazolo-azole derivs.)				
IT	89-25-8	90-15-3	.alpha.-Naphthol	95-55-6D, derivs.	95-88-5
	108-26-9	108-45-2	1,3-Benzenediamine, biological studies	108-45-2D,	
	1,3-Benzenediamine, derivs.	108-46-3	1,3-Benzenediol, biological studies	123-30-8D, derivs.	124-43-6
	533-31-3, Sesamol	591-27-5	591-27-5D, derivs.	608-25-3	2380-86-1,
	6-Hydroxyindole	2380-94-1,	4-Hydroxyindole	2835-95-2,	2-Methyl-5-aminophenol
	4664-16-8	4770-37-0,	6-Hydroxyindoline	7556-37-8	7722-84-1,
	Hydrogen peroxide, biological studies	9003-99-0,	Peroxidase	9055-15-6,	
	Oxidoreductase	10035-10-6D,	HydroBromic acid, alkali metal salts		
	30569-52-9	55302-96-0	70643-19-5	81892-72-0	83763-47-7
	93691-22-6	93846-05-0	94216-82-7	111628-46-7	227610-58-4
	227610-59-5	227610-60-8	227610-61-9	227610-62-0	227610-63-1
	227610-64-2	227610-65-3	227610-66-4	227610-67-5	227610-68-6
	227610-69-7	227610-70-0	227610-71-1	227610-72-2	227610-73-3
	227610-74-4	227610-75-5	227610-76-6	227610-77-7	227610-78-8
	227610-79-9	227610-81-3	227610-82-4	227610-83-5	227610-84-6
	227610-85-7	227610-86-8	227610-87-9	227610-88-0	227610-89-1
	227610-90-4	227610-91-5	227610-92-6	227610-93-7	227610-94-8
	227610-95-9	227610-96-0	227610-97-1	227610-98-2	227610-99-3
	227611-00-9	227611-01-0	227611-02-1	227611-03-2	227611-04-3
	227611-05-4	227611-06-5	227611-07-6	227611-08-7	227611-09-8
	227611-10-1	227611-11-2	227611-12-3	227611-13-4	227611-14-5

227611-15-6 227611-16-7 227611-17-8 227611-18-9 227611-19-0
227611-20-3 227611-21-4 227611-22-5 227611-23-6 227611-24-7
227611-25-8 227611-26-9 227611-27-0 227611-28-1 227611-29-2
227611-30-5 227611-31-6 227611-32-7 227611-33-8 227611-34-9
227611-35-0 227611-36-1 227611-37-2 227611-38-3 227611-39-4
227611-40-7 227611-41-8 227611-42-9 227611-43-0 227611-44-1
227611-45-2 227611-46-3 227611-47-4 227611-48-5 227611-49-6
227611-50-9, 1H-Imidazo[1,2-b]pyrazol-7-amine 227611-51-0 227611-52-1
227611-53-2 227611-54-3 227611-55-4 227611-56-5 227611-57-6
227611-58-7 227611-59-8 227611-60-1 227611-61-2 227611-62-3
227611-63-4 227611-64-5 227611-65-6 227611-66-7,
1H-Imidazo[1,2-b]pyrazole-6,7-diamine 227611-67-8 227611-68-9
227611-69-0 227611-70-3 227611-71-4 227611-72-5 227611-73-6
227611-74-7 227611-75-8 227611-76-9 227611-77-0 227611-78-1
227611-79-2 227611-80-5 227611-81-6

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye prepns. contg. pyrazolo-azole derivs.)

IT 227611-82-7P 227611-85-0P 227611-90-7P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oxidative hair dye prepns. contg. pyrazolo-azole derivs.)

IT 78-39-7, Ethyl orthoacetate 104-15-4, reactions 108-24-7, Acetic anhydride 110-46-3, Isopentyl nitrite 124-41-4, Sodium methylate 621-62-5, Chloroacetaldehyde diethylacetal 1118-61-2, 3-Aminocrotonitrile 2231-57-4, Thiocarbazine 4755-81-1, Methyl 2-chloroacetoacetate 5470-11-1, Hydroxylamine hydrochloride 7697-37-2, Nitric acid, reactions 7727-54-0, Ammonium persulfate 10025-87-3, Phosphoryl chloride 14011-37-1, Hydrazine hydrochloride 31230-17-8, 5-Amino-3-methylpyrazole

RL: RCT (Reactant)

(oxidative hair dye prepns. contg. pyrazolo-azole derivs.)

IT 42351-81-5P 42351-83-7P 42351-84-8P 83725-05-7P 93846-27-6P
111628-45-6P 126782-74-9P 197356-57-3P 227611-84-9P 227611-86-1P
227611-87-2P 227611-88-3P 227611-89-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(oxidative hair dye prepns. contg. pyrazolo-azole derivs.)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) L'Oreal; WO 9735551 A 1997 HCAPLUS

(2) Wella; WO 9307849 A 1993 HCAPLUS

IT 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye prepns. contg. pyrazolo-azole derivs.)

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 31 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:282060 HCAPLUS

DN 130:316430

TI Oxidative hair dye compositions containing oxidoreductase-type enzymes

IN Lang, Gerard; Cotteret, Jean

PA L'Oreal, Fr.

SO PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9920236	A1	19990429	WO 1998-FR2231	19981016
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	FR 2769835	A1	19990423	FR 1997-13243	19971022
	FR 2769835	B1	19991126		
	AU 9895463	A1	19990510	AU 1998-95463	19981016
	AU 715964	B2	20000210		
	BR 9806283	A	20000215	BR 1998-6283	19981016
	EP 981322	A1	20000301	EP 1998-949073	19981016
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	JP 2000516266	T2	20001205	JP 1999-523369	19981016
PRAI	FR 1997-13243	A	19971022		
	WO 1998-FR2231	W	19981016		
OS	MARPAT 130:316430				
AB	A ready-to-use oxidn. dyeing compn. for keratin fibers, and in particular for human keratin fibers such as hair comprise, in an appropriate dyeing medium, at least an auto-oxidable dye, and at least an oxidoreductase-type enzyme with two electrons in the presence of at least a donor for said enzyme, and the dyeing method using said compn. A hair dye compn. contained 5,6-dihydroxyindole hydrobromide 1.2, uricase (20 IU/mg) 1.5, uric acid 1.5, and water and excipients q.s. 100%. The compn. is applied on the hair for 30 min followed by washing and drying to obtain a blond color.				
ST	oxidative hair dye oxidoreductase enzyme; uric acid hydroxyindole oxidative hair dye; uricase hydroxyindole oxidative hair dye				
IT	Organic solvents (1soxidative hair dye compns. contg. oxidoreductase-type enzymes)				
IT	Oxidative hair dyes (oxidative hair dye compns. contg. oxidoreductase-type enzymes)				
IT	Enzymes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (oxidative hair dye compns. contg. oxidoreductase-type enzymes)				
IT	69-93-2, Uric acid, biological studies 533-73-3, 1,2,4-Trihydroxybenzene 1124-09-0, 1-Methyl-2,4,5-trihydroxybenzene 2380-82-7, 5-Methoxy-6-hydroxyindole 3131-52-0, 5,6-Dihydroxyindole 4790-08-3, 5,6-Dihydroxyindole 2-carboxylic acid 4813-45-0, 3-Methyl-5,6-dihydroxyindole 4821-00-5, 1-Methyl-5,6-dihydroxyindole 4821-01-6, 2-Methyl-5,6-dihydroxyindole 5107-75-5, 2,3-Dimethyl-5,6-				

dihydroxyindole 9001-37-0, Glucose oxidase
 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase
 9003-99-0, Peroxidase 9028-72-2, Lactate oxidase
 9055-15-6, Oxidoreductase 15069-79-1,
 5,6-Diacetoxyindole 15872-73-8 29539-03-5, 5,6-Dihydroxyindoline
 37250-80-9, Pyranose oxidase 38213-78-4, 2,6-Diamino-4-
 diethylaminophenol 69669-73-4, Glycerol oxidase 72584-61-3
 89532-67-2 113370-02-8, 5-Acetoxy-6-hydroxyindole 139721-20-3
 139721-21-4 223569-35-5 223569-36-6
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Novo Nordisk A/S; WO 9737633 A 1997 HCAPLUS
- (2) Wella AG; EP 0795313 A 1997 HCAPLUS
- (3) Yamahatsu Sangyo Kaisha Ltd; EP 0716846 A 1996 HCAPLUS

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase

9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 32 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:282059 HCAPLUS

DN 130:316429

TI Oxidative hair dye comprising a direct cationic dye and a direct nitrated
 benzene dye

IN Rondeau, Christine

PA L'Oreal, Fr.

SO PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9920235	A1	19990429	WO 1998-FR2145	19981007
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9894474	A1	19990510	AU 1998-94474	19981007
AU 730009	B2	20010222		
BR 9806716	A	20000404	BR 1998-6716	19981007
JP 2000505841	T2	20000516	JP 1999-523337	19981007
EP 999823	A1	20000517	EP 1998-947623	19981007

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

NO 9903053	A	19990820	NO 1999-3053	19990621
US 2002004956	A1	20020117	US 1999-331252	19990816

PRAI FR 1997-13240 A 19971022
WO 1998-FR2145 W 19981007

OS MARPAT 130:316429

AB A ready-to-use **compn.** for dyeing keratin fibers, and in particular human keratin fibers such as hair comprising, in an appropriate dyeing medium, at least a direct cationic dye properly selected, and at least a direct nitrated benzene dye, and the dyeing method using said **compn.** are disclosed. A hair dye **compn.** contained 2-amino-5-hydroxy nitrobenzene 0.35, a direct cationic orange dye 0.065, water and excipients q.s. 100%. The **compn.** is applied on the hair for 30 min, then washed and dried to obtain a copper color.

ST oxidative hair dye direct cationic dye; benzene dye oxidative hair dye

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(alkali metal salts; oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

IT Direct dyes

(cationic; oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

IT Cationic dyes

(direct; oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

IT Salts, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(of peroxy acids; oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

IT **Coupling agents**

Organic solvents

Oxidative hair dyes

Oxidizing agents

(oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

IT Enzymes, biological studies

Peroxyulfates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

IT Group IIIA element compounds

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(perborates; oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

IT 51-17-2D, Benzimidazole, derivs. 69-93-2, **Uric acid**,
biological studies 95-54-5D, 1,2-Benzenediamine, derivs. 99-56-9,
3,4-Diaminonitrobenzene 99-57-0 106-50-3D, 1,4-Benzenediamine, derivs.
108-45-2D, 1,3-Benzenediamine, derivs. 110-86-1D, Pyridine, derivs.

119-34-6 121-88-0 123-30-8D, derivs. 124-43-6 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs. 570-24-1 591-27-5D, derivs. 603-85-0, 2-Amino-3-hydroxynitrobenzene 610-81-1, 2-Amino-5-hydroxynitrobenzene 2784-94-3 2871-01-4 2973-21-9 4926-55-0 5131-58-8, 2,4-Diaminonitrobenzene 5307-14-2, 2,5-Diaminonitrobenzene 5735-53-5D, Benzomorpholine, derivs. 6358-09-4 6687-56-5 7722-84-1, Hydrogen peroxide (H2O2), biological studies 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase 9028-72-2, Lactate oxidase 9055-15-6, Oxidoreductase 10228-03-2 13556-31-5 13586-81-7 21425-62-7 24455-89-8 24455-90-1 24905-87-1 27080-42-8 29705-39-3 33229-34-4 37250-80-9, Pyranose oxidase 39838-87-4 42476-20-0 50610-28-1 50982-74-6 51138-16-0 54940-81-7 56932-44-6 57524-53-5 59820-43-8 59820-63-2 62163-15-9 63810-68-4 64651-39-4 65235-31-6 66095-81-6 66748-37-6 68259-00-7 68912-02-7 69669-73-4, Glycerol oxidase 73447-48-0 75655-00-4 77061-58-6 80062-31-3 81608-25-5 81612-54-6 82576-74-7 82576-75-8 82856-89-1 82856-91-5 82857-00-9 83950-26-9 84041-77-0 84741-77-5 84912-24-3 85765-48-6 86419-67-2 86419-68-3 86419-73-0 86419-75-2 86419-76-3 89923-52-4 92888-19-2 92952-81-3 93633-79-5 93940-65-9 95576-85-5 97404-02-9 97406-09-2 99133-38-7 100418-33-5 104226-19-9 109023-83-8 109220-25-9 131657-78-8 141973-33-3 143084-49-5 160598-04-9 161328-83-2 161328-85-4 161328-86-5 161328-87-6 161328-89-8 161328-91-2 161328-92-3 161328-94-5 161328-95-6 161328-96-7 161328-99-0 161329-01-7 161329-02-8 161329-04-0 161329-05-1 161329-06-2 161329-07-3 161329-08-4 161329-09-5 161329-15-3 161329-16-4 161329-17-5 161329-18-6 161329-22-2 161329-23-3 161329-25-5 161329-26-6 161329-27-7 161329-28-8 161329-29-9 161329-30-2 161329-31-3 161329-35-7 161329-37-9 161329-38-0 161329-39-1 161329-40-4 161329-42-6 161329-43-7 161329-44-8 161329-45-9 161329-47-1 161329-49-3 167382-76-5 167382-77-6 167382-78-7 167382-79-8 167382-80-1 167382-82-3 167382-83-4 167382-87-8 167382-88-9 167382-95-8 167382-96-9 167382-97-0 167382-98-1 167382-99-2 178822-03-2 178822-05-4 211050-61-2 223577-35-3 223577-36-4 223577-37-5 223577-38-6 223577-39-7 223577-40-0 223577-41-1 223577-42-2 223577-43-3 223577-44-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Lang, G; US 3985499 A 1976 HCAPLUS

(2) Lang, G; US 4025301 A 1977 HCAPLUS

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase

9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS
CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 33 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:282058 HCAPLUS

DN 130:316428

TI Oxidative hair dye comprising a cationic direct dye and an auto-oxidizable dye

IN Lang, Gerard; Audousset, Marie-Pascale

PA L'Oreal, Fr.

SO PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9920234	A1	19990429	WO 1998-FR2144	19981007
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 9894473	A1	19990510	AU 1998-94473	19981007
	AU 730008	B2	20010222		
	EP 971682	A1	20000119	EP 1998-947622	19981007
	R:	AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE			
	BR 9806825	A	20000425	BR 1998-6825	19981007
	JP 2000516265	T2	20001205	JP 1999-523336	19981007
PRAI	FR 1997-13242	A	19971022		
	WO 1998-FR2144	W	19981007		

OS MARPAT 130:316428

AB A ready-to-use **compn.** for dyeing keratin fibers, and in particular human keratin fibers such as hair comprising, in an appropriate dyeing medium, at least a cationic direct dye, and at least an auto-oxidizable dye, and the dyeing method using said **compn.** is disclosed. A hair dye **compn.** contained 5,6-dihydroxyindoline hydrobromide 0.7, cationic direct Basic Red 76 0.1, water and excipients q.s. 100%. The **compn.** is applied on the hair for 30 min, then washed and dried to obtain a red blond color.

ST oxidative hair dye cationic direct dye; hydroxyindoline oxidative hair dye Basic Red

IT Bromates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(alkali metal; oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)

IT Direct dyes

(cationic; oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)

IT Cationic dyes

(direct; oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)

IT Salts, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (of peroxy acids; oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)

IT Coupling agents
 Organic solvents
 Oxidative hair dyes
 Oxidizing agents
 (oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)

IT Enzymes, biological studies
 Peroxysulfates
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)

IT Group IIIA element compounds
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (perborates; oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)

IT 51-17-2D, Benzimidazole, derivs. 69-93-2, Uric acid, biological studies 95-54-5D, 1,2-Benzenediamine, derivs. 95-55-6D, derivs. 106-50-3D, 1,4-Benzenediamine, derivs. 108-45-2D, 1,3-Benzenediamine, derivs. 110-86-1D, Pyridine, derivs. 123-30-8D, derivs. 124-43-6 289-95-2D, Pyrimidine, derivs. 533-31-3D, Sesamol, derivs. 533-73-3, 1,2,4-Trihydroxybenzene 591-27-5D, derivs. 965-47-9 1124-09-0, 1-Methyl-2,4,5-trihydroxybenzene 3131-52-0, 5,6-Dihydroxyindole 4790-08-3 4813-45-0, 3-Methyl-5,6-Dihydroxyindole 4821-00-5, 1-Methyl-5,6-Dihydroxyindole 4821-01-6, 2-Methyl-5,6-Dihydroxyindole 5107-75-5, 2,3-Dimethyl-5,6-Dihydroxyindole 5735-53-5D, Benzomorpholine, derivs. 6687-56-5 7722-84-1, Hydrogen peroxide (H2O2), biological studies 9002-12-4, Uricase 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase 15069-79-1, 5,6-Diacetoxyindole 15872-73-8 26381-41-9 29539-03-5, 5,6-Dihydroxyindoline 36118-45-3D, Pyrazoline, derivs. 38213-78-4 39838-87-4 42476-20-0 54940-81-7 62163-15-9 64651-39-4 68123-13-7 68259-00-7 68391-30-0 68391-31-1 68912-02-7 71134-97-9 72584-61-3 73447-48-0 74795-36-1, 5-Methoxy-6-hydroxyindoline 75655-00-4 77061-58-6 83950-26-9 84912-24-3 89532-67-2 89923-52-4 92888-19-2 93940-65-9 97404-02-9 97406-09-2 109220-25-9 113370-02-8, 5-Acetoxy-6-hydroxyindole 138937-28-7, 5,6-Dihydroxyindoline hydrobromide 139721-20-3 139721-21-4 143084-49-5 160598-04-9 161328-83-2 161328-85-4 161328-86-5 161328-87-6 161328-89-8 161328-91-2 161328-92-3 161328-94-5 161328-95-6 161328-96-7 161329-01-7 161329-02-8 161329-04-0 161329-05-1 161329-06-2 161329-07-3 161329-08-4 161329-09-5 161329-15-3 161329-16-4 161329-17-5 161329-18-6 161329-22-2 161329-23-3 161329-25-5 161329-26-6 161329-27-7 161329-28-8 161329-29-9 161329-30-2 161329-31-3 161329-35-7 161329-37-9 161329-38-0 161329-39-1 161329-40-4 161329-42-6 161329-43-7 161329-44-8 161329-45-9 161329-47-1 161329-49-3 167382-76-5 167382-77-6 167382-78-7 167382-79-8 167382-80-1 167382-82-3 167382-83-4 167382-87-8 167382-88-9 167382-95-8 167382-96-9 167382-97-0 167382-98-1 167382-99-2 178822-05-4 211050-61-2 223569-36-6 223671-96-3
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye comprising cationic direct

dye and auto-oxidizable dye)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Lang, G; US 3985499 A 1976 HCAPLUS

(2) Lang, G; US 4025301 A 1977 HCAPLUS

IT 9002-12-4, Uricase 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye comprising cationic direct
dye and auto-oxidizable dye)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 34 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244549 HCAPLUS

DN 130:286801

TI Oxidative hair dye compositions containing
oxidoreductase-type enzymes, oxidation bases, and coupling
agents

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
PA L'Oreal, Fr.

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917733	A1	19990415	WO 1998-FR2078	19980928
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	FR 2769210	A1	19990409	FR 1997-12350	19971003
	FR 2769210	B1	20000211		
	AU 9893542	A1	19990427	AU 1998-93542	19980928
	AU 730735	B2	20010315		
	EP 969799	A1	20000112	EP 1998-946519	19980928
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	BR 9806218	A	20000418	BR 1998-6218	19980928
	JP 2000507990	T2	20000627	JP 1999-521120	19980928
	NO 9902649	A	19990730	NO 1999-2649	19990601
	US 6342078	B1	20020129	US 1999-319203	19990630
	US 2002010966	A1	20020131		
PRAI	FR 1997-12350	A	19971003		
	WO 1998-FR2078	W	19980928		
OS	MARPAT 130:286801				

- AB A ready-to-use oxidn. **dyeing compn.** for keratin fibers, and in particular for human keratin fibers such as hair comprise, in a medium appropriate for **dyeing**, at least an oxidn. base, at least a substituted meta-phenylenediamine as first **coupling agent**, and at least a second **coupling agent** selected among meta-aminophenols and meta-diphenols, and at least an **oxidoreductase**-type enzyme with 2 electrons in the presence of at least a donor for said enzyme. A hair dye compn. contained para-phenylenediamine 0.216, (2,4-diamino-1-.beta.-hydroxyethyloxy)benzene.2HCl 0.048, 1,3-dihydroxybenzene 0.198, uricase (20 IU/mg) 1.5, uric acid 1.5, excipients and water q.s. 100 g.
- ST oxidative hair dye oxidoreductase enzyme base; **coupling agent** oxidative hair dye oxidoreductase
- IT **Coupling agents**
Organic solvents
Oxidative hair dyes
Oxidizing agents
(oxidative hair dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and **coupling agents**)
- IT Enzymes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative hair dye compns. contg. oxidoreductase-type enzymes, oxidn. bases, and **coupling agents**)
- IT 69-93-2, Uric acid, biological studies 90-01-7, 2-Hydroxy-methylphenol 92-65-9 93-05-0, N,N-Diethyl p-phenylenediamine 95-55-6, 2-Aminophenol 95-70-5 95-88-5, 4-Chloro 1,3-dihydroxybenzene 99-98-9, N,N-Dimethyl p-phenylenediamine 101-54-2, N-(Phenyl) p-phenylenediamine 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 110-86-1D, Pyridine, derivs. 123-30-8 148-71-0, 4-Amino-N,N-Diethyl 3-methyl aniline 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs. 399-95-1, 4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluorophenol 537-65-5 591-27-5 591-27-5D, derivs. 608-25-3 615-66-7, 2-Chloro p-phenylenediamine 1630-11-1, 2,6-Diethyl p-phenylenediamine 1687-53-2, 5-Amino-2-Methoxy-phenol 2359-52-6 2359-53-7 2835-95-2, 5-Amino-2-methylphenol 2835-96-3, 4-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 5306-96-7, 2,3-Dimethyl p-phenylenediamine 5862-77-1 5862-80-6 6201-65-6, 2-Chloro 1,3-dihydroxybenzene 6393-01-7, 2,5-Dimethyl p-phenylenediamine 7218-02-2, 2,6-Dimethyl p-phenylenediamine 7575-35-1, N,N-Bis-(.beta.-hydroxyethyl) p-phenylenediamine 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase 9003-99-0, Peroxidase 9028-72-2, Lactate oxidase 9055-15-6, Oxidoreductase 14791-78-7, 2-Fluoro-p-phenylenediamine 17672-22-9, 2-Amino-6-methylphenol 29785-47-5, 4-Amino-2-methoxymethylphenol 37250-80-9, Pyranose oxidase 55302-96-0 63969-43-7 66422-95-5 66566-48-1 69669-73-4, Glycerol oxidase 70643-19-5 73793-80-3, 2-Hydroxymethyl p-phenylenediamine 75513-65-4 78661-33-3 79352-72-0 80467-77-2 81892-72-0 83763-47-7 86817-42-7 93841-24-8, 2-.beta.-Hydroxyethyl p-phenylenediamine 97902-52-8, 2-Isopropyl p-phenylenediamine 104752-49-0 104752-50-3 105293-89-8, N,N-Dipropyl p-phenylenediamine 105607-68-9 110102-86-8, 5-Amino-4-chloro-2-methylphenol 110952-46-0 114109-54-5, 5-Amino-2,4-dimethoxy-phenol

115423-85-3 126335-43-1 128729-31-7 129697-50-3 130028-72-7
130582-53-5 135855-34-4 135855-35-5 137290-78-9,
5-Amino-4-methoxy-2-methylphenol 137290-86-9 141614-04-2 141614-05-3
146658-65-3, 5-(.gamma.-Hydroxypropylamino)-2-methylphenol 168092-23-7
168202-61-7 207568-58-9 221110-58-3 222849-57-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes, oxidn. bases, and coupling
agents)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Tsujino, Y; US 4961925 A 1990 HCAPLUS

(2) Wella Ag; EP 0795313 A 1997 HCAPLUS

(3) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 HCAPLUS

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase

9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes, oxidn. bases, and coupling
agents)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 35 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244548 HCAPLUS

DN 130:286800

TI Oxidative hair dye compositions containing

oxidoreductase-type enzymes, oxidation bases, and coupling
agents

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille

PA LOreal, Fr.

SO PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917732	A1	19990415	WO 1998-FR2077	19980928
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,			

CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FR 2769212	A1	19990409	FR 1997-12352	19971003
FR 2769212	B1	20000211		
AU 9893541	A1	19990427	AU 1998-93541	19980928
AU 732954	B2	20010503		
EP 973489	A1	20000126	EP 1998-946518	19980928

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

BR 9806216	A	20000418	BR 1998-6216	19980928
JP 2000507989	T2	20000627	JP 1999-521119	19980928
NO 9902648	A	19990630	NO 1999-2648	19990601
US 2002002747	A1	20020110	US 1999-319165	19990630

PRAI FR 1997-12352 A 19971003
WO 1998-FR2077 W 19980928

OS MARPAT 130:286800

AB A ready-to-use oxidn. **dyeing compn.** for keratin fibers, and in particular human keratin fibers such as hair comprise, in a medium appropriate for **dyeing**, para-phenylenediamine as first oxidn. base, at least a para-aminophenol as second oxidn. base, 2-Me 5-N-(.beta.-hydroxyethyl)amino phenol (I) as **coupling agent**, and at least an **oxidoreductase**-type enzyme with 2 electrons in the presence of at least a donor for said enzyme. A hair **dye compn.** contained uricase (20 IU/mg) 1.5, uric acid 1.5, p-phenylenediamine 0.216, para-aminophenol 0.1, I 0.18, ethanol 20.0, hydroxyethyl cellulose 1.0, Oramix CG110 8.0, monoethanolamine q.s. pH = 9.5, excipients and water q.s. 100 g.

ST oxidative hair **dye oxidoreductase** enzyme
base; **coupling agent** hair **dye oxidoreductase** enzyme

IT **Coupling agents**
Organic solvents
Oxidative hair **dyes**
Oxidizing agents
(oxidative hair **dye compns.** contg. **oxidoreductase**-type enzymes, oxidn. bases, and **coupling agents**)

IT Enzymes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative hair **dye compns.** contg. **oxidoreductase**-type enzymes, oxidn. bases, and **coupling agents**)

IT 69-93-2, Uric acid, biological studies 90-01-7, 2-Hydroxy-methylphenol 106-50-3, p-Phenylenediamine, biological studies 123-30-8, p-Aminophenol 399-95-1, 4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluorophenol 2835-96-3, 4-Amino-2-methylphenol 2835-99-6, 4-Amino-3-methylphenol 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase 9028-72-2, Lactate oxidase 9055-15-6, Oxidoreductase 29785-47-5, 4-Amino-2-methoxymethylphenol 37250-80-9, Pyranose oxidase 55302-96-0, 2-Methyl 5-N-(.beta.-hydroxyethyl)amino phenol 69669-73-4, Glycerol oxidase 79352-72-0 110952-46-0 168202-61-7
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative hair **dye compns.** contg. **oxidoreductase**-type enzymes, oxidn. bases, and **coupling agents**)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Tsujino, Y; US 4961925 A 1990 HCAPLUS
 (2) Wella Ag; EP 0795313 A 1997 HCAPLUS
 (3) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 HCAPLUS

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase
 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes, oxidn. bases, and coupling
 agents)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 36 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244547 HCAPLUS

DN 130:286799

TI Oxidative hair dye compositions containing
 oxidoreductase-type enzymes and oxidation bases

IN Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917731	A1	19990415	WO 1998-FR2076	19980928
	W:				
	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
	DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,				
	KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,				
	MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,				
	TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				
	FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				
	CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2769214	A1	19990409	FR 1997-12354	19971003
	FR 2769214	B1	19991217		
	AU 9893540	A1	19990427	AU 1998-93540	19980928
	AU 732786	B2	20010426		
	BR 9806175	A	19991019	BR 1998-6175	19980928
	EP 998260	A1	20000510	EP 1998-946517	19980928
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, FI				
	JP 2000507988	T2	20000627	JP 1999-521118	19980928
	NO 9902647	A	19990730	NO 1999-2647	19990601
	US 6312479	B1	20011106	US 1999-319205	19990602

US 2001049850 A1 20011213
 PRAI FR 1997-12354 A 19971003
 WO 1998-FR2076 W 19980928
 OS MARPAT 130:286799
 AB A ready-to-use oxidn. **dyeing compn.** for **keratin** fibers, and in particular for human **keratin** fibers such as **hair** comprise, in a medium appropriate for **dyeing**, at least an oxidn. base, 2-amino-3-hydroxy pyridine (I) as **coupling agent**, and at least an **oxidoreductase-type** enzyme with 2 electrons in the presence of at least a donor for said enzyme. A **hair dye compn.** contained uricase (20 IU/mg) 1.5, uric acid 1.5, p-phenylenediamine 0.30, I 0.30, excipients and water q.s. 100 g.
 ST oxidative **hair dye oxidoreductase** enzyme
 aminopyridine
 IT **Anionic surfactants**
 Coupling agents
 Organic solvents
 Oxidative **hair dyes**
 Oxidizing agents
 (oxidative **hair dye compns.** contg.
oxidoreductase-type enzymes and oxidn. bases)
 IT Enzymes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative **hair dye compns.** contg.
oxidoreductase-type enzymes and oxidn. bases)
 IT 69-93-2, **Uric acid**, biological studies 90-01-7,
 2-Hydroxy-methylphenol 92-65-9 93-05-0, N,N-Diethyl p-phenylenediamine
 95-70-5 99-98-9, N,N-Dimethyl p-phenylenediamine 101-54-2, N-(Phenyl)
 p-phenylenediamine 106-50-3, 1,4-Benzenediamine, biological studies
 110-86-1D, Pyridine, derivs. 123-30-8 148-71-0, 4-Amino-N,N-Diethyl
 3-methyl aniline 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine,
 derivs. 399-95-1, 4-Amino-3-fluorophenol 399-96-2,
 4-Amino-2-fluorophenol 537-65-5 615-66-7, 2-Chloro p-phenylenediamine
 1630-11-1, 2,6-Diethyl p-phenylenediamine 2359-52-6 2359-53-7
 2835-96-3, 4-Amino-2-methylphenol 2835-98-5D, 2-Amino-5-methylphenol,
 derivs. 2835-99-6, 4-Amino-3-methylphenol 5306-96-7, 2,3-Dimethyl
 p-phenylenediamine 5862-80-6 6393-01-7, 2,5-Dimethyl
 p-phenylenediamine 7218-02-2, 2,6-Dimethyl p-phenylenediamine
 7575-35-1, N,N-Bis-(.beta.-hydroxyethyl) p-phenylenediamine
 9001-37-0, **Glucose oxidase** 9001-96-1, **Pyruvate**
 oxidase 9002-12-4, Uricase 9003-99-0, Peroxidase 9028-72-2,
Lactate oxidase 9055-15-6, **Oxidoreductase**
 14791-78-7, 2-Fluoro-p-phenylenediamine 16867-03-1, 2-Amino-3-hydroxy
 pyridine 17672-22-9, 2-Amino-6-Methyl-phenol 29785-47-5,
 4-Amino-2-methoxymethylphenol 37250-80-9, Pyranose oxidase 63969-43-7
 66566-48-1 69669-73-4, **Glycerol oxidase** 73793-80-3,
 2-Hydroxymethyl p-phenylenediamine 79352-72-0 80467-77-2 93841-24-8,
 2-.beta.-Hydroxyethyl p-phenylenediamine 97902-52-8, 2-Isopropyl
 p-phenylenediamine 105293-89-8, N,N-Dipropyl p-phenylenediamine
 105607-68-9 110952-46-0 126335-43-1 128729-31-7 129697-50-3
 130582-53-5 135855-35-5 168202-61-7 207568-58-9 221110-58-3
 222849-57-2
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative **hair dye compns.** contg.
oxidoreductase-type enzymes and oxidn. bases)
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

(1) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
 (2) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
 (3) L'Oreal; EP 0766958 A 1997 HCAPLUS
 (4) Procter & Gamble; WO 9724105 A 1997 HCAPLUS
 IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase
 9055-15-6, Oxidoreductase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye compns. contg.
 oxidoreductase-type enzymes and oxidn. bases)
 RN 9001-37-0 HCAPLUS
 CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS
 CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS
 CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 37 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244546 HCAPLUS

DN 130:301479

TI Oxidative hair dye compositions containing
 oxidoreductase-type enzymes, oxidation bases, and direct cationic
 dyes

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917730	A1	19990415	WO 1998-FR2075	19980928
W:				
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,				
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,				
MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,				
TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2769213	A1	19990409	FR 1997-12353	19971003
FR 2769213	B1	19991217		
AU 9893539	A1	19990427	AU 1998-93539	19980928
AU 732773	B2	20010426		
EP 969798	A1	20000112	EP 1998-946516	19980928
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, FI				
BR 9806205	A	20000215	BR 1998-6205	19980928
JP 2000507987	T2	20000627	JP 1999-521117	19980928
NO 9902646	A	19990712	NO 1999-2646	19990601
US 6228129	B1	20010508	US 1999-319166	19990701

PRAI FR 1997-12353 A 19971003
 WO 1998-FR2075 W 19980928
 OS MARPAT 130:301479
 AB A ready-to-use oxidn. dyeing compn. for
 keratin fibers, and in particular for human keratin
 fibers such as hair comprise, in a medium appropriate for
 dyeing at least an oxidn. base, at least a direct cationic
 dye, and at least an oxidoreductase-type enzyme with 2
 electrons in the presence of at least a donor for said enzyme. A
 hair dye compn. contained para-
 phenylenediamine 0.7, 2-(4-methylaminophenylazo)-1,3-dimethylimidazolium
 chloride 0.6, uricase (20 IU/mg) 1.5, uric acid 1.5, excipients
 and water q.s. 100 g.
 ST oxidative hair dye oxidoreductase enzyme
 base; direct cationic dye oxidative hair dye
 IT Direct dyes
 (azo, cationic; oxidative hair dye compns
 . contg. oxidoreductase-type enzymes, oxidn. bases, and
 direct cationic dyes)
 IT Cationic dyes
 (azo; oxidative hair dye compns. contg.
 oxidoreductase-type enzymes, oxidn. bases, and direct cationic
 dyes)
 IT Azo dyes
 (cationic; oxidative hair dye compns.
 contg. oxidoreductase-type enzymes, oxidn. bases, and direct
 cationic dyes)
 IT Azo dyes
 (direct, cationic; oxidative hair dye
 compns. contg. oxidoreductase-type enzymes, oxidn.
 bases, and direct cationic dyes)
 IT Anthraquinone dyes
 Disazo dyes
 Organic solvents
 Oxidative hair dyes
 Oxidizing agents
 (oxidative hair dye compns. contg.
 oxidoreductase-type enzymes, oxidn. bases, and direct cationic
 dyes)
 IT Enzymes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye compns. contg.
 oxidoreductase-type enzymes, oxidn. bases, and direct cationic
 dyes)
 IT 69-93-2, Uric acid, biological studies 90-01-7,
 2-Hydroxy-methylphenol 92-65-9 93-05-0, N,N-Diethyl p-phenylenediamine
 95-55-6, 2-Aminophenol 95-70-5 99-98-9, N,N-Dimethyl
 p-phenylenediamine 101-54-2, N-(Phenyl) p-phenylenediamine 106-50-3,
 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine,
 biological studies 110-86-1D, Pyridine, derivs. 123-30-8 148-71-0,
 4-Amino-N,N-Diethyl 3-methyl aniline 288-13-1D, Pyrazole, derivs.
 289-95-2D, Pyrimidine, derivs. 399-95-1, 4-Amino-3-fluorophenol
 399-96-2, 4-Amino-2-fluorophenol 537-65-5 591-27-5 591-27-5D,
 derivs. 615-66-7, 2-Chloro p-phenylenediamine 1630-11-1, 2,6-Diethyl
 p-phenylenediamine 2359-52-6 2359-53-7 2835-96-3,
 4-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6,
 4-Amino-3-methylphenol 5306-96-7, 2,3-Dimethyl p-phenylenediamine
 5862-80-6 6393-01-7, 2,5-Dimethyl p-phenylenediamine 6687-56-5
 7218-02-2, 2,6-Dimethyl p-phenylenediamine 7575-35-1,

N,N-Bis-(.beta.-hydroxyethyl) p-phenylenediamine 9001-37-0,
 Glucose oxidase 9001-96-1, Pyruvate oxidase
 9002-12-4, Uricase 9003-99-0, Peroxidase 9028-72-2,
 Lactate oxidase 9055-15-6, Oxidoreductase
 14791-78-7, 2-Fluoro-p-phenylenediamine 17672-22-9, 2-Amino-6-
 methylphenol 26381-41-9 29785-47-5, 4-Amino-2-methoxymethylphenol
 37250-80-9, Pyranose oxidase 39838-87-4 42476-20-0 54940-81-7
 55302-96-0D, 5-N-(.beta.-hydroxyethyl)amino-2-methylphenol 62163-15-9
 63969-43-7 64651-39-4 66566-48-1 68123-13-7 68259-00-7
 68391-30-0, Basic red 76 68391-31-1 68912-02-7 69669-73-4,
 Glycerol oxidase 71134-97-9 73287-60-2 73447-48-0
 73793-80-3, 2-Hydroxymethyl p-phenylenediamine 75655-00-4 77061-58-6
 79352-72-0 80467-77-2 83950-26-9 84912-24-3 89923-52-4
 92888-19-2 93841-24-8, 2-.beta.-Hydroxyethyl p-phenylenediamine
 93940-65-9 97404-02-9 97406-09-2 97902-52-8, 2-Isopropyl
 p-phenylenediamine 105293-89-8, N,N-Dipropyl p-phenylenediamine
 105607-68-9 109220-25-9 110952-46-0 126335-43-1 128729-30-6
 128729-31-7 129697-50-3 130582-53-5 135855-34-4 135855-35-5
 143084-49-5 160598-04-9 161328-83-2 161328-85-4 161328-86-5
 161328-87-6 161328-89-8 161328-91-2 161328-92-3 161328-94-5
 161328-95-6 161328-96-7 161328-99-0 161329-01-7 161329-02-8
 161329-05-1 161329-06-2 161329-07-3 161329-08-4 161329-09-5
 161329-15-3 161329-16-4 161329-17-5 161329-18-6 161329-22-2
 161329-23-3 161329-25-5 161329-26-6 161329-27-7 161329-28-8
 161329-29-9 161329-30-2 161329-31-3 161329-35-7 161329-37-9
 161329-38-0 161329-39-1 161329-40-4 161329-42-6 161329-43-7
 161329-44-8 161329-47-1 161329-49-3 167382-76-5 167382-77-6
 167382-78-7 167382-79-8 167382-80-1 167382-82-3 167382-83-4
 167382-87-8 167382-88-9 167382-95-8 167382-96-9 167382-97-0
 167382-98-1 167382-99-2 168202-61-7 178822-03-2 178822-05-4
 207568-58-9 211050-61-2 221110-58-3 223241-29-0 223241-31-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes, oxidn. bases, and direct cationic
 dyes)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
- (2) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
- (3) Oreal; WO 9400100 A 1994 HCAPLUS

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase
 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes, oxidn. bases, and direct cationic
 dyes)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 38 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244545 HCAPLUS

DN 130:286798

TI Oxidative hair dye compositions containing

oxidoreductase-type enzymes and oxidation bases

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917729	A1	19990415	WO 1998-FR2074	19980928
	W:				
	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
	DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,				
	KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,				
	MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,				
	TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				
	FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				
	CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2769211	A1	19990409	FR 1997-12351	19971003
	FR 2769211	B1	19991224		
	AU 9893538	A1	19990427	AU 1998-93538	19980928
	AU 730765	B2	20010315		
	BR 9806206	A	20000418	BR 1998-6206	19980928
	EP 998259	A1	20000510	EP 1998-946515	19980928
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, FI				
	JP 2000507986	T2	20000627	JP 1999-521116	19980928
	NO 9902645	A	19990730	NO 1999-2645	19990601
PRAI	FR 1997-12351	A	19971003		
	WO 1998-FR2074	W	19980928		

OS MARPAT 130:286798

AB A ready-to-use oxidn. dyeing compn. for

keratin fibers, and in particular human keratin fibers

such as hair comprise, in a medium appropriate for

dyeing, at least an oxidn. base selected among

para-phenylenediamine derivs., double bases, ortho-aminophenols and

heterocyclic bases, at least a second oxidn. base selected among

para-aminophenols, at least a meta-aminophenol as coupling

agent, and at least an oxidoreductase-type enzyme with 2

electrons in the presence of at least a donor for said enzyme. A

hair dye compn. contained uricase (20 IU/mg)

1.5, uric acid 1.5, 2-.beta.-hydroxyethyl-p-

phenylenediamine.2HCl 0.45, p-aminophenol 0.1, excipients and water q.s.

100 g.

ST oxidative hair dye oxidoreductase enzyme

base

IT Amphoteric surfactants

Anionic surfactants

Antioxidants

Cationic surfactants

Coupling agents

Nonionic surfactants

Organic solvents
 Oxidative hair dyes
 Oxidizing agents
 Perfumes
 Permanent wave preparations
 Permeation enhancers
 Preservatives
 Sequestering agents
 Thickening agents
 Zwitterionic surfactants
 (oxidative hair dye compns. contg.
 oxidoreductase-type enzymes and oxidn. bases)

IT Enzymes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes and oxidn. bases)
 IT 69-93-2, Uric acid, biological studies 90-01-7,
 2-Hydroxy-methylphenol 92-65-9 93-05-0, N,N-Diethyl p-phenylenediamine
 95-70-5 99-98-9, N,N-Dimethyl p-phenylenediamine 101-54-2, N-(Phenyl)
 p-phenylenediamine 106-50-3, 1,4-Benzenediamine, biological studies
 110-86-1D, Pyridine, derivs. 123-30-8 148-71-0, 4-Amino-N,N-Diethyl
 3-methyl aniline 288-13-1D, Pyrazole, derivs. 289-95-2D, Pyrimidine,
 derivs. 399-95-1, 4-Amino-3-fluorophenol 399-96-2,
 4-Amino-2-fluorophenol 537-65-5 591-27-5D, derivs. 615-66-7,
 2-Chloro p-phenylenediamine 1630-11-1, 2,6-Diethyl p-phenylenediamine
 1687-53-2, 5-Amino-2-Methoxy-phenol 2359-52-6 2359-53-7 2835-95-2,
 5-Amino-2-methylphenol 2835-96-3, 4-Amino-2-methylphenol 2835-99-6,
 4-Amino-3-methylphenol 5306-96-7, 2,3-Dimethyl p-phenylenediamine
 5862-80-6 6393-01-7, 2,5-Dimethyl p-phenylenediamine 7218-02-2,
 2,6-Dimethyl p-phenylenediamine 7575-35-1, N,N-Bis-(.beta.-hydroxyethyl)
 p-phenylenediamine 9001-37-0, Glucose oxidase
 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase
 9003-99-0, Peroxidase 9028-72-2, Lactate oxidase
 9055-15-6, Oxidoreductase 14791-78-7,
 2-Fluoro-p-phenylenediamine 29785-47-5, 4-Amino-2-methoxymethylphenol
 34590-94-8, Dipropyleneglycolmonomethylether 37250-80-9, Pyranose
 oxidase 55302-96-0 63969-43-7 66566-48-1 69669-73-4,
 Glycerol oxidase 73793-80-3, 2-Hydroxymethyl p-phenylenediamine
 79352-72-0 80467-77-2 86817-42-7 93841-24-8, 2-.beta.-Hydroxyethyl
 p-phenylenediamine 97902-52-8, 2-Isopropyl p-phenylenediamine
 105293-89-8, N,N-Dipropyl p-phenylenediamine 105607-68-9 110102-86-8,
 5-Amino-4-chloro-2-methylphenol 110952-46-0 114109-54-5,
 5-Amino-2,4-dimethoxy-phenol 126335-43-1 128729-31-7 130582-53-5
 135855-34-4 135855-35-5 137290-78-9, 5-Amino-4-methoxy-2-methylphenol
 137290-86-9 146658-65-3, 5-(.gamma.-Hydroxypropylamino)-2-methylphenol
 160950-38-9 168202-61-7 207568-58-9 221110-58-3 222849-57-2
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes and oxidn. bases)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Tsujino, Y; US 4961925 A 1990 HCAPLUS
- (2) Wella Ag; EP 0795313 A 1997 HCAPLUS
- (3) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 HCAPLUS

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase
 9055-15-6, Oxidoreductase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes and oxidn. bases)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 39 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244544 HCAPLUS

DN 130:286797

TI Oxidative hair dye compositions containing
 oxidoreductase-type enzymes and glycols

IN Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917728	A1	19990415	WO 1998-FR2073	19980928
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2769215	A1	19990409	FR 1997-12355	19971003
	FR 2769215	B1	19991224		
	AU 9893537	A1	19990427	AU 1998-93537	19980928
	AU 737852	B2	20010830		
	BR 9806172	A	19991019	BR 1998-6172	19980928
	EP 998258	A1	20000510	EP 1998-946514	19980928
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000507985	T2	20000627	JP 1999-521115	19980928
	NO 9902644	A	19990628	NO 1999-2644	19990601
	US 2002013971	A1	20020207	US 1999-319164	19990629
PRAI	FR 1997-12355	A	19971003		
	WO 1998-FR2073	W	19980928		

OS MARPAT 130:286797

AB A ready-to-use oxidn. dyeing compn. for
 keratin fibers, and in particular human keratin fibers
 such as hair comprise, in an appropriate medium for
 dyeing, at least an oxidn. base, at least a C2 glycol C4-8 ether
 and/or a C3-9 glycol C1-8 ether and at least an oxidoreductase
 -type enzyme with 2 electrons in the presence of at least a donor for said

enzyme. A hair dye compn. contained uricase
(20 IU/mg) 1.5, uric acid 1.5, p-phenylenediamine 0.324,
1,3-dihydroxybenzene 0.33, propylene glycol monomethyl ether 20.0,
hydroxyethyl cellulose 1.0, Oramix CG110 8.0, monoethanolamine q.s. pH =
9.5, and water q.s. 100 g.

ST oxidative hair dye oxidoreductase enzyme
glycol

IT Amphoteric surfactants

Anionic surfactants

Antioxidants

Cationic surfactants

Coupling agents

Nonionic surfactants

Opacifiers

Organic solvents

Oxidative hair dyes

Oxidizing agents

Perfumes

Permanent wave preparations

Permeation enhancers

Preservatives

Sequestering agents

Thickening agents

Zwitterionic surfactants

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and glycols)

IT Enzymes, biological studies

Glycol ethers

Glycols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and glycols)

IT 69-93-2, Uric acid, biological studies 89-25-8 90-01-7,
2-Hydroxy-methylphenol 90-15-3, .alpha.-Naphthol 92-65-9 93-05-0,
N,N-Diethyl p-phenylenediamine 95-55-6, 2-Aminophenol 95-55-6D,
o-Aminophenol, derivs. 95-70-5 95-88-5, 4-Chloro-1,3-dihydroxybenzene
99-98-9, N,N-Dimethyl p-phenylenediamine 101-54-2, N-(Phenyl)
p-phenylenediamine 104-68-7, Diethyleneglycol monophenylether
106-50-3, 1,4-Benzenediamine, biological studies 108-26-9 108-45-2,
1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol,
biological studies 110-86-1D, Pyridine, derivs. 111-77-3,
Diethyleneglycolmonomethylether 111-90-0, Diethyleneglycolmonoethylether
123-30-8 148-71-0, 4-Amino-N,N-Diethyl 3-methyl aniline 288-13-1D,
Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs. 399-95-1,
4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluorophenol 533-31-3,
Sesamol 537-65-5 591-27-5, 3-Aminophenol 608-25-3 615-66-7,
2-Chloro p-phenylenediamine 1320-67-8, Propyleneglycol monomethylether
1630-11-1, 2,6-Diethyl p-phenylenediamine 2050-25-1, Diethyleneglycol
monobenzylether 2359-52-6 2359-53-7 2380-94-1, 4-Hydroxyindole
2835-95-2, 2-Methyl-5-Aminophenol 2835-96-3, 4-Amino-2-methylphenol
2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol
4664-16-8, 2,6-Dihydroxy 4-methyl pyridine 4770-37-0, 6-Hydroxyindoline
5306-96-7, 2,3-Dimethyl p-phenylenediamine 5862-80-6 6393-01-7,
2,5-Dimethyl p-phenylenediamine 7218-02-2, 2,6-Dimethyl
p-phenylenediamine 7556-37-8 7575-35-1, N,N-Bis-(.beta.-hydroxyethyl)
p-phenylenediamine 9001-37-0, Glucose oxidase
9001-96-1, Pyruvate oxidase 9002-12-4, Uricase
9003-99-0, Peroxidase 9004-62-0, Hydroxyethyl cellulose 9028-72-2,
Lactate oxidase 9055-15-6, Oxidoreductase

14791-78-7, 2-Fluoro-p-phenylenediamine 17672-22-9, 2-Amino-6-methylphenol 24991-61-5 25498-49-1, Tripropyleneglycolmonomethylether 29785-47-5, 4-Amino-2-methoxymethylphenol 34590-94-8, Dipropyleneglycolmonomethylether 37250-80-9, Pyranose oxidase 41593-38-8, Propyleneglycol monophenylether 52125-53-8, Propyleneglycol monoethylether 55302-96-0 63969-43-7 66251-49-8 66566-48-1 69669-73-4, Glycerol oxidase 70643-19-5 73793-80-3, 2-Hydroxymethyl p-phenylenediamine 79352-72-0 80467-77-2 81892-72-0, 1,3-Bis(2,4-diaminophenoxy)propane 83763-47-7 93841-24-8, 2-.beta.-Hydroxyethyl p-phenylenediamine 97902-52-8, 2-Isopropyl p-phenylenediamine 105293-89-8, N,N-Dipropyl p-phenylenediamine 105607-68-9 110952-46-0 126335-43-1 128729-31-7 129697-50-3 130582-53-5 135855-34-4 135855-35-5 168202-61-7 197179-33-2, Oramix CG110 207568-58-9 221110-58-3 222849-57-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg.
oxidoreductase-type enzymes and glycols)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Kyowa Hakko K K K; EP 0310675 A 1989 HCAPLUS
- (2) Tsujino, Y; US 4961925 A 1990 HCAPLUS
- (3) Wella Ag; EP 0795313 A 1997 HCAPLUS
- (4) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 HCAPLUS

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase

9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg.
oxidoreductase-type enzymes and glycols)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 40 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244543 HCAPLUS

DN 130:301478

TI Oxidative hair dye compositions containing

oxidoreductase-type enzymes and polymers

IN De La Mettrie, Roland; Cotteret, Jean; De Labrey, Arnaud; Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917727	A1	19990415	WO 1998-FR2026	19980922

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FR 2769217 A1 19990409 FR 1997-12357 19971003

FR 2769217 B1 20000317

AU 9892695 A1 19990427 AU 1998-92695 19980922

AU 719804 B2 20000518

BR 9806261 A 20000125 BR 1998-6261 19980922

EP 975318 A1 20000202 EP 1998-945350 19980922

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 2000507983 T2 20000627 JP 1999-521107 19980922

ZA 9809001 A 19990412 ZA 1998-9001 19981002

US 6251145 B1 20010626 US 1999-319199 19990602

US 2002004959 A1 20020117 US 2001-832878 20010412

PRAI FR 1997-12357 A 19971003

WO 1998-FR2026 W 19980922

US 1999-319199 A3 19990602

AB A cosmetic and/or dermatol. **compn.** for treating **keratin** fibers, in particular human **keratin** fibers and more particularly human **hair** comprise in an appropriate support for **keratin** fibers: (a) at least an **oxidoreductase**-type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least a substantive polymer selected in the group consisting of: (i) cellulosic cationic derivs.; (ii) dimethyldiallylammonium halide homopolymers and dimethyldiallylammonium copolymers and (meth)acrylic acid; (iii) methacryloyloxyethyltrimethylammonium halide homopolymers and copolymers; (iv) quaternary polyammonium polymers; (v) vinylpyrrolidone polymers with cationic structural units; and (vi) their mixts. The invention also concerns the methods for treating **keratin** fibers in particular methods for **dyeing**, permanently setting or bleaching **hair** using said **compn**.
 . A **hair dye compn.** contained uricase (20 IU/mg) 1.5, **uric** acid 1.5, p-phenylenediamine 0.324, resorcin 0.33, Merquat 280 (acrylic acid-dimethyldiallylammonium chloride copolymer) 1.0, and water q.s. 100 g.

ST oxidative **hair dye oxidoreductase** enzyme polymer

IT Amphoteric surfactants

Anionic surfactants

Antioxidants

Cationic surfactants

Coupling agents

Nonionic surfactants

Opacifiers

Organic solvents

Oxidizing agents

Perfumes

Permanent wave preparations

Permeation enhancers

Preservatives

Sequestering agents

Thickening agents

Zwitterionic surfactants

(oxidative **hair dye compns.** contg.

oxidoreductase-type enzymes and polymers)
 IT Enzymes, biological studies
 Paraffin oils
 Polymers, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye compns. contg.
oxidoreductase-type enzymes and polymers)
 IT Quaternary ammonium compounds, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (polymers; oxidative hair dye compns.
 contg. **oxidoreductase-type enzymes and polymers)**
 IT 69-93-2, Uric acid, biological studies 106-50-3,
 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine,
 biological studies 108-46-3, 1,3-Benzenediol, biological studies
 591-27-5 9002-12-4, Uricase 9004-34-6D, Cellulose, alkyl ether
 derivs. 9015-06-9 9055-15-6, **Oxidoreductase**
 26062-79-3, Merquat 100 26161-33-1 30581-59-0, Dimethylaminoethyl
 methacrylate-vinylpyrrolidone copolymer 35429-19-7 53694-17-0, Merquat
 280 68393-49-7 95144-24-4 131954-48-8 197179-33-2, Oramix cgl110
 223104-80-1
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye compns. contg.
oxidoreductase-type enzymes and polymers)
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
 (2) Goldwell Ag; EP 0548620 A 1993 HCAPLUS
 (3) Goldwell Ag; EP 0548621 A 1993 HCAPLUS
 (4) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
 (5) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
 (6) Oreal; FR 2586913 A 1987
 (7) Oreal, S; WO 9400100 A 1994 HCAPLUS
 (8) Wella Ag; EP 0795313 A 1997 HCAPLUS
 IT 9002-12-4, Uricase 9055-15-6, **Oxidoreductase**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair dye compns. contg.
oxidoreductase-type enzymes and polymers)
 RN 9002-12-4 HCAPLUS
 CN Oxidase, urate (9CI) (CA INDEX NAME)

 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN 9055-15-6 HCAPLUS
 CN Oxidoreductase (9CI) (CA INDEX NAME)

 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

 L70 ANSWER 41 OF 53 HCAPLUS COPYRIGHT 2002 ACS
 AN 1999:244542 HCAPLUS
 DN 130:271867
 TI Oxidative hair dye compositions containing
oxidoreductase-type enzymes and basic amino acids
 IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
 PA L'Oreal, Fr.
 SO PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DT Patent

LA French
 IC ICM A61K007-13
 ICS A61K007-09; A61K007-135
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917726	A1	19990415	WO 1998-FR2025	19980922
	W:				
	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2769219	A1	19990409	FR 1997-12359	19971003
	FR 2769219	B1	20000310		
	AU 9892694	A1	19990427	AU 1998-92694	19980922
	AU 718420	B2	20000413		
	EP 969797	A1	20000112	EP 1998-945349	19980922
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9806248	A	20000125	BR 1998-6248	19980922
	JP 2000507982	T2	20000627	JP 1999-521106	19980922
	ZA 9809006	A	19990412	ZA 1998-9006	19981002
	US 6270534	B1	20010807	US 1999-319167	19990602
	US 2001044977	A1	20011129	US 2001-832882	20010412
PRAI	FR 1997-12359	A	19971003		
	WO 1998-FR2025	W	19980922		
	US 1999-319167	A3	19990602		
OS	MARPAT 130:271867				
AB	Cosmetic compn. for treating keratin fibers comprise in an appropriate support for keratin fibers: (a) at least an oxidoreductase -type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least a basic amino acid. Methods for treating keratin fibers, in particular the methods for dyeing , permanently setting or bleaching hair using said compn. are also disclosed. A hair dye compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5, Oramix CG110 8.0, p-phenylenediamine 0.324, resorcin 0.33, hydroxyethyl cellulose 1.0, ethanol 20.0, arginine q.s. pH = 9.5, and water q.s. 100 g.				
ST	oxidative hair dye amino acid; oxidoreductase enzyme oxidative hair dye				
IT	Amphoteric surfactants				
	Anionic surfactants				
	Antioxidants				
	Cationic surfactants				
	Coupling agents				
	Nonionic surfactants				
	Opacifiers				
	Organic solvents				
	Oxidizing agents				
	Perfumes				
	Permanent wave preparations				
	Permeation enhancers				
	Preservatives				
	Sequestering agents				
	Thickening agents				

Zwitterionic surfactants
(oxidative hair dye compns. contg.
oxidoreductase-type enzymes and basic amino acids)

IT Basic amino acids
Enzymes, biological studies
Polymers, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compns. contg.
oxidoreductase-type enzymes and basic amino acids)

IT 56-87-1, Lysine, biological studies 69-93-2, Uric acid,
biological studies 74-79-3, Arginine, biological studies 95-55-6
106-50-3, 1,4-Benzenediamine, biological studies 108-45-2,
1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol,
biological studies 372-75-8, Citrulline 591-27-5 9002-12-4,
Uricase 9004-62-0, Hydroxyethyl cellulose 9055-15-6,
Oxidoreductase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compns. contg.
oxidoreductase-type enzymes and basic amino acids)

IT 197179-33-2, Oramix cg110
RL: NUU (Other use, unclassified); USES (Uses)
(oxidative hair dye compns. contg.
oxidoreductase-type enzymes and basic amino acids)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
- (2) Goldwell Ag; EP 0548620 A 1993 HCAPLUS
- (3) Goldwell Ag; EP 0548621 A 1993 HCAPLUS
- (4) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
- (5) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
- (6) Oreal; FR 2586913 A 1987
- (7) Oreal, S; WO 9400100 A 1994 HCAPLUS
- (8) Wella Ag; EP 0795313 A 1997 HCAPLUS

IT 9002-12-4, Uricase 9055-15-6, Oxidoreductase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair dye compns. contg.
oxidoreductase-type enzymes and basic amino acids)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 42 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244541 HCAPLUS

DN 130:271866

TI Oxidative hair dye compositions containing
oxidoreductase-type enzymes and non-ionic amphiphilic polymers

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13
ICS A61K007-06; A61K007-09; A61K007-135
CC 62-3 (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917725	A1	19990415	WO 1998-FR2023	19980922
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2769220	A1	19990409	FR 1997-12360	19971003
	FR 2769220	B1	20000310		
	AU 9892692	A1	19990427	AU 1998-92692	19980922
	AU 719808	B2	20000518		
	EP 977547	A1	20000209	EP 1998-945347	19980922
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9806222	A	20000418	BR 1998-6222	19980922
	JP 2000507980	T2	20000627	JP 1999-521104	19980922
	ZA 9809002	A	19990412	ZA 1998-9002	19981002
	US 6312477	B1	20011106	US 1999-319207	19990802
PRAI	FR 1997-12360	A	19971003		
	WO 1998-FR2023	W	19980922		
AB	A cosmetic compn. for treating keratin fibers comprise in an appropriate support for keratin fibers: (a) at least an oxidoreductase -type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least an anionic amphiphilic polymer comprising at least an allyl structural unit with a fatty chain. Methods for treating keratin fibers, in particular the methods for dyeing , permanently setting or bleaching hair using said compn. are also disclosed. A hair dye compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5, Oramix CG110 8.0, p-phenylenediamine 0.324, resorcin 0.32, Salcare SC90 (an acrylic polymer) 3.0, ethanol 20.0, monoethanolamine q.s. pH = 9.5, and water q.s. 100 g.				
ST	oxidative hair dye oxidoreductase enzyme polymer				
IT	Polymers, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (non-ionic amphiphilic; oxidative hair dye compns. contg. oxidoreductase -type enzymes and non-ionic amphiphilic polymers)				
IT	Amphoteric surfactants Antioxidants Cationic surfactants Coupling agents Nonionic surfactants Opacifiers Organic solvents Oxidizing agents Perfumes Permanent wave preparations Permeation enhancers Preservatives				

Sequestering agents

Thickening agents

Zwitterionic surfactants

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and non-ionic amphiphilic polymers)

IT Acrylic polymers, biological studies

Enzymes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and non-ionic amphiphilic polymers)

IT 69-93-2, Uric acid, biological studies 106-50-3,

1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine,

biological studies 108-46-3, 1,3-Benzenediol, biological studies

591-27-5 9002-12-4, Uricase 9055-15-6,

Oxidoreductase 109292-17-3, Salcare SC90

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and non-ionic amphiphilic polymers)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS

(2) Goldwell Ag; EP 0548620 A 1993 HCAPLUS

(3) Goldwell Ag; EP 0548621 A 1993 HCAPLUS

(4) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS

(5) Oreal; FR 2586913 A 1987

(6) Oreal; EP 0827739 A 1998 HCAPLUS

(7) Oreal, S; WO 9400100 A 1994 HCAPLUS

(8) Wella Ag; EP 0795313 A 1997 HCAPLUS

(9) Yamahatsu Sangyo Kaisha; EP 0716846 A 1996 HCAPLUS

IT 9002-12-4, Uricase 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and non-ionic amphiphilic polymers)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 43 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244540 HCAPLUS

DN 130:286796

TI Oxidative hair dye compositions containing

oxidoreductase-type enzymes and non-ionic amphiphilic polymers

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

ICS A61K007-06

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917724	A1	19990415	WO 1998-FR2022	19980922
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2769221	A1	19990409	FR 1997-12361	19971003
	FR 2769221	B1	20000114		
	AU 9892691	A1	19990427	AU 1998-92691	19980922
	AU 719807	B2	20000518		
	BR 9806249	A	20000125	BR 1998-6249	19980922
	EP 998257	A1	20000510	EP 1998-945346	19980922
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000507979	T2	20000627	JP 1999-521103	19980922
	ZA 9809004	A	19990412	ZA 1998-9004	19981002
	US 6273920	B1	20010814	US 1999-319208	19990602
PRAI	FR 1997-12361	A	19971003		
	WO 1998-FR2022	W	19980922		
AB	A cosmetic compn. for treating keratin fibers comprise in an appropriate support for keratin fibers: (a) at least an oxidoreductase type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least a non-ionic amphiphilic polymer comprising at least a fatty chain and at least a hydrophilic structural unit. Methods for treating keratin fibers, in particular methods for dyeing , permanently setting and bleaching hair using said compn. are also disclosed. A hair dye compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5, Oramix CG110 8.8, p-phenylenediamine 0.324, resorcin 0.32, Dapral T212 (urethane polyether) 1.0, ethanol 20.0, monoethanolamine q.s. pH = 9.5, and water q.s. 100 g.				
ST	oxidative hair dye oxidoreductase enzyme polymer				
IT	Amphoteric surfactants Anionic surfactants Antioxidants Cationic surfactants Coupling agents Nonionic surfactants Opacifiers Organic solvents Oxidizing agents Perfumes Permanent wave preparations Permeation enhancers Preservatives Sequestering agents Thickening agents Zwitterionic surfactants (oxidative hair dye compns. contg. oxidoreductase -type enzymes and non-ionic amphiphilic polymers)				
IT	Enzymes, biological studies Polyether-polyurethanes Polymers, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES				

(Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and non-ionic amphiphilic polymers)

IT 69-93-2, Uric acid, biological studies 106-50-3,
 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine,
 biological studies 108-46-3, 1,3-Benzenediol, biological studies
 591-27-5 9002-12-4, Uricase 9004-34-6D, Cellulose, alkyl ether
 derivs. 9004-62-0, Hydroxyethyl cellulose 9055-15-6,
 Oxidoreductase 37353-59-6, Hydroxymethyl cellulose 39421-75-5,
 Hydroxypropyl guar 77035-98-4 77035-99-5, Hexadecene-vinylpyrrolidone
 copolymer 88322-43-4 138860-57-8, Dapral T212 222833-13-8
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and non-ionic amphiphilic polymers)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Kyowa Hakko K K K; EP 0310675 A 1989 HCAPLUS

(2) L'Oreal; FR 2694018 A 1994 HCAPLUS

(3) Wella Ag; DE 1048389 B

IT 9002-12-4, Uricase 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and non-ionic amphiphilic polymers)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 44 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244539 HCAPLUS

DN 130:301477

TI Oxidative hair dye compositions containing

oxidoreductase-type enzymes and fatty sucronamides

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

ICS A61K007-135; A61K007-09

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917723	A1	19990415	WO 1998-FR2020	19980922
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

FR 2769222	A1	19990409	FR 1997-12362	19971003
FR 2769222	B1	19991231		
AU 9892689	A1	19990427	AU 1998-92689	19980922
AU 718518	B2	20000413		
EP 975317	A1	20000202	EP 1998-945344	19980922

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

BR 9806223	A	20000418	BR 1998-6223	19980922
JP 2000507977	T2	20000627	JP 1999-521101	19980922
RU 2158585	C1	20001110	RU 1999-114011	19980922
ZA 9809005	A	19990412	ZA 1998-9005	19981002

PRAI	FR 1997-12362	A	19971003
	WO 1998-FR2020	W	19980922

OS MARPAT 130:301477

AB A cosmetic **compn.** for treating **keratin** fibers comprise in an appropriate support for the **keratin** fibers: (a) at least an **oxidoreductase**-type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least a non-ionic fatty sucronamide. Methods for treating **keratin** fibers, in particular for **dyeing**, permanently setting, or bleaching **hair** using said **compn.** are also disclosed. A **hair dye compn.** contained uricase (20 IU/mg) 1.5, uric acid 1.5, ethanol 20.0, hydroxyethyl cellulose 1.0, N-cocolactobionamide 5, p-phenylenediamine 0.324, resorcin 0.33, and water q.s. 100 g.

ST oxidative **hair dye oxidoreductase** enzyme
sucronamide

IT Fatty amides
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(N-substituted derivs.; oxidative **hair dye compns.** contg. **oxidoreductase**-type enzymes and fatty sucronamides)

IT Amphoteric surfactants

Anionic surfactants

Antioxidants

Cationic surfactants

Coupling agents

Nonionic surfactants

Opacifiers

Organic solvents

Oxidizing agents

Perfumes

Permanent wave preparations

Permeation enhancers

Preservatives

Sequestering agents

Thickening agents

Zwitterionic surfactants

(oxidative **hair dye compns.** contg. **oxidoreductase**-type enzymes and fatty sucronamides)

IT Enzymes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative **hair dye compns.** contg. **oxidoreductase**-type enzymes and fatty sucronamides)

IT 69-93-2, **Uric acid**, biological studies 96-82-2D, Lactobionic acid, N-substituted derivs. 106-50-3, 1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, Resorcin, biological studies 534-42-9D, Maltobionic acid, N-substituted

derivs. 591-27-5 9002-12-4, Uricase 9055-15-6,
Oxidoreductase 43169-32-0D, Cellobionamide, N-alkyl derivs.
 85261-20-7, N-Decanoyl-N-methylglucamine 95524-89-3D, Melibionamide,
 N-alkyl derivs. 159189-90-9D, Gentiobionamide, N-alkyl derivs.
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and fatty sucronamides)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS

(2) Unilever Nv; EP 0550106 A 1993 HCAPLUS

(3) Unilever Plc Unilever Nv NL; WO 9412511 A 1994 HCAPLUS

IT 9002-12-4, Uricase 9055-15-6, **Oxidoreductase**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and fatty sucronamides)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 45 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244538 HCAPLUS

DN 130:286795

TI Oxidative hair dye compositions containing

oxidoreductase-type enzymes and amine silicones

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille

PA L'Oreal, Fr.

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-09

ICS A61K007-135; A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917722	A1	19990415	WO 1998-FR2027	19980922
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	FR 2769218	A1	19990409	FR 1997-12358	19971003
	FR 2769218	B1	20000310		
	AU 9892696	A1	19990427	AU 1998-92696	19980922
	AU 718441	B2	20000413		
	EP 969795	A1	20000112	EP 1998-945351	19980922
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

	BR 9806262	A	20000125	BR 1998-6262	19980922
	JP 2000507984	T2	20000627	JP 1999-521108	19980922
	ZA 9809003	A	19990412	ZA 1998-9003	19981002
	US 2001049849	A1	20011213	US 2001-832877	20010412
PRAI	FR 1997-12358	A	19971003		
	WO 1998-FR2027	W	19980922		
	US 1999-319206	A3	19990602		

AB A cosmetic **compn.** for treating **keratin** fibers comprise in an appropriate support for **keratin** fibers: (a) at least an **oxidoreductase**-type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least an amine silicone. Methods for treating **keratin** fibers, in particular methods for **dyeing**, permanently setting or bleaching **hair** using said **compn.** are also disclosed. A **hair dye compn.** contained uricase (20 IU/mg) 1.5, uric acid 1.5, p-phenylenediamine 0.324, resorcin 0.33, Dow Corning 939 emulsion (polydimethylsiloxane contg. aminoethylaminopropyl group) 1.2, and water q.s. 100 g.

ST oxidative **hair dye oxidoreductase** enzyme
silicone

IT Polysiloxanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(3-[(2-aminoethyl)amino]-2-methylpropyl Me, di-Me; oxidative **hair dye compns.** contg. **oxidoreductase**-type enzymes and amine silicones)

IT Polysiloxanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(amino-contg.; oxidative **hair dye compns.** contg. **oxidoreductase**-type enzymes and amine silicones)

IT Amphoteric surfactants
Anionic surfactants
Antioxidants
Cationic surfactants
Coupling agents
Nonionic surfactants
Opacifiers
Perfumes
Permanent wave preparations
Permeation enhancers
Preservatives
Sequestering agents
Thickening agents
Zwitterionic surfactants
(oxidative **hair dye compns.** contg. **oxidoreductase**-type enzymes and amine silicones)

IT Enzymes, biological studies
Polysiloxanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative **hair dye compns.** contg. **oxidoreductase**-type enzymes and amine silicones)

IT 69-93-2, **Uric acid**, biological studies 106-50-3,
1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 123-30-8 591-27-5 9002-12-4, Uricase 9055-15-6,
Oxidoreductase 203341-07-5, Dow Corning 939
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes and amine silicones)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
- (2) Goldwell Ag; EP 0548620 A 1993 HCAPLUS
- (3) Goldwell Ag; EP 0548621 A 1993 HCAPLUS
- (4) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
- (5) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
- (6) Oreal; FR 2586913 A 1987
- (7) Oreal; WO 9400100 A 1994 HCAPLUS
- (8) Wella Ag; EP 0795313 A 1997 HCAPLUS

IT 9002-12-4, Uricase 9055-15-6, Oxidoreductase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg.
 oxidoreductase-type enzymes and amine silicones)

RN 9002-12-4 HCAPLUS.

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 46 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244537 HCAPLUS

DN 130:286794

TI Oxidative hair dye compositions containing
 oxidoreductase-type enzymes and anionic guar gums

IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
 PA L'Oreal, Fr.

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-06

ICS A61K007-13; A61K007-135; A61K007-09

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917721	A1	19990415	WO 1998-FR2024	19980922
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
FR 2769216	A1	19990409	FR 1997-12356	19971003
FR 2769216	B1	19991231		
AU 9892693	A1	19990427	AU 1998-92693	19980922
AU 718348	B2	20000413		
EP 966247	A1	19991229	EP 1998-945348	19980922
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2000507981	T2	20000627	JP 1999-521105	19980922

	BR 9806171	A	20010109	BR 1998-6171	19980922
	ZA 9809000	A	19990412	ZA 1998-9000	19981002
	US 6241784	B1	20010605	US 1999-319163	19990602
PRAI	FR 1997-12356	A	19971003		
	WO 1998-FR2024	W	19980922		

AB A cosmetic **compn.** for treating **keratin** fibers comprise in an appropriate support for **keratin** fibers: (a) at least an **oxidoreductase**-type enzyme with 2 electrons in the presence of at least a donor for said enzyme; and (b) at least a non-ionic guar gum. Methods for treating **keratin** fibers, in particular the methods for **dyeing**, permanent setting or bleaching **hair** using said **compn.** are also disclosed. A **hair dye compn.** contained uricase (20 IU/mg) 1.5, **uric acid** 1.5, ethanol 20.0, Oramix CG110 8.0, p-phenylenediamine 0.324, resorcin 0.32, Jaguar HP60 1.6, monoethanolamine q.s. pH = 9.5, and water q.s. 100 g.

ST oxidative **hair dye oxidoreductase** enzyme;
anionic guar gum oxidative **hair dye**

IT Amphoteric surfactants
Anionic surfactants
Antioxidants
Cationic surfactants
Coupling agents
Nonionic surfactants
Opacifiers
Perfumes
Permanent wave preparations
Permeation enhancers
Preservatives
Sequestering agents
Thickening agents
Zwitterionic surfactants
(oxidative **hair dye compns.** contg.
oxidoreductase-type enzymes and anionic guar gums)

IT Enzymes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative **hair dye compns.** contg.
oxidoreductase-type enzymes and anionic guar gums)

IT 69-93-2, **Uric acid**, biological studies 106-50-3,
1,4-Benzenediamine, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 123-30-8 591-27-5 9000-30-0D, Guar gum, Cl-6 **hydroxyalkyl** derivs. 9002-12-4, Uricase 9055-15-6,
Oxidoreductase 39421-75-5, Jaguar HP60 39465-11-7,
Hydroxyethyl guar gum 62931-11-7
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxidative **hair dye compns.** contg.
oxidoreductase-type enzymes and anionic guar gums)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS
- (2) Kaisha, Y; EP 0716846 A 1996 HCAPLUS
- (3) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 HCAPLUS
- (4) Oreal; WO 9400100 A 1994 HCAPLUS
- (5) Procter & Gamble; FR 2112550 A 1972 HCAPLUS
- (6) Thomas, K; US 3893803 A 1975 HCAPLUS
- (7) Wella Ag; EP 0795313 A 1997 HCAPLUS

IT 9002-12-4, Uricase 9055-15-6, **Oxidoreductase**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(oxidative hair dye compns. contg.
oxidoreductase-type enzymes and anionic guar gums)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 47 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:244536 HCAPLUS

DN 130:301476

TI Oxidative hair dye compositions containing
oxidoreductase-type enzymes and anionic
surfactantsIN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
PA L'Oreal, Fr.

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-06

ICS A61K007-50

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917720	A1	19990415	WO 1998-FR2021	19980922
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2769223	A1	19990409	FR 1997-12363	19971003
AU 9892690	A1	19990427	AU 1998-92690	19980922
AU 718674	B2	20000420		
BR 9806252	A	20000125	BR 1998-6252	19980922
EP 998255	A1	20000510	EP 1998-945345	19980922
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000507978	T2	20000627	JP 1999-521102	19980922
ZA 9809007	A	19990412	ZA 1998-9007	19981002
US 6261325	B1	20010717	US 1999-319201	19990709
PRAI FR 1997-12363	A	19971003		
WO 1998-FR2021	W	19980922		

OS MARPAT 130:301476

AB A cosmetic compn. for treating keratin fibers comprise in an appropriate support for keratin fibers: (a) at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme; (b) at least an anionic surfactant selected in the group consisting of (i) acylisethionates; (ii) acyltaurates (iii) acylsarcosinates; (iv) acylglutamates; (v) polyoxyalkylene carboxylic ether acids and their salts; (vi) fatty

glucamide sulfates; (vii) **alkylgalactoside** uronates; (viii) **alkylpolyglucoside** anionic derivs.; and (ix) their mixts. Methods for treating **keratin** fibers, in particular for **dyeing**, permanently setting or bleaching hair using said **compn** . are also disclosed. A **hair dye compn**. contained uricase (20 IU/mg) 1.5, **uric acid** 1.5, ethanol 20.0, hydroxyethyl cellulose 1.0, **Acylglutamate** CT12 15.0, p-phenylenediamine 0.324, resorcin 0.33, monoethanolamine q.s. pH = 9.5, and water q.s. 100 g.

ST **oxidative hair dye oxidoreductase enzyme**
surfactant

IT **Coco fatty acids**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(2-sulfoethyl esters, sodium salts; **oxidative hair dye compns.** contg. **oxidoreductase-type** enzymes and anionic surfactants)

IT **Galactosides**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(alkyl derivs.; **oxidative hair dye compns** . contg. **oxidoreductase-type** enzymes and anionic surfactants)

IT **Fatty acid salts**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(coco, 2-sulfoethyl esters, sodium salts; **oxidative hair dye compns.** contg. **oxidoreductase-type** enzymes and anionic surfactants)

IT **Amphoteric surfactants**
Anionic surfactants
Antioxidants
Cationic surfactants
Coupling agents
Nonionic surfactants
Opacifiers
Oxidizing agents
Perfumes
Permanent wave preparations
Permeation enhancers
Preservatives
Sequestering agents
Thickening agents
Zwitterionic surfactants
(**oxidative hair dye compns.** contg. **oxidoreductase-type** enzymes and anionic surfactants)

IT **Enzymes, biological studies**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(**oxidative hair dye compns.** contg. **oxidoreductase-type** enzymes and anionic surfactants)

IT **Carboxylic acids, biological studies**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(**polyoxyalkylene;** **oxidative hair dye compns.** contg. **oxidoreductase-type** enzymes and anionic surfactants)

IT 27306-90-7

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(Akypo RLM; oxidative hair dye compns.

contg. **oxidoreductase**-type enzymes and **anionic surfactants**)

IT 56-86-0D, Glutamic acid, acyl derivs. 69-93-2, Uric acid, biological studies 106-50-3, 1,4-Benzenediamine, biological studies 107-36-8D, Isethionic acid, acyl derivs. 107-97-1D, Sarcosinic acid, acyl derivs. 108-45-2, 1,3-Benzenediamine, biological studies 108-46-3, 1,3-Benzenediol, biological studies 137-16-6, Sodium lauroylsarcosinate 591-27-5 5138-18-1D, Sulfosuccinic acid, alkylpolyglucoside derivs. 7664-38-2D, Phosphoric acid, alkylpolyglucoside derivs. 9002-12-4, Uricase 9055-15-6, **Oxidoreductase** 38732-22-8D, Triethanolamine glutamate, cocoyl derivs.

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and **anionic surfactants**)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Beiersdorf Ag; DE 19547991 A 1997 HCAPLUS

(2) Kyowa Hakko K K K; EP 0310675 A 1989 HCAPLUS

(3) L'Oreal; FR 2694018 A 1994 HCAPLUS

IT 9002-12-4, Uricase 9055-15-6, **Oxidoreductase**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg.

oxidoreductase-type enzymes and **anionic surfactants**)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 48 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:231492 HCAPLUS

DN 130:257164

TI Enzymic foam **compositions** for dyeing keratinous fibers

IN Sorensen, Niels Henrik

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K007-13

ICS A61K007-06

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9915137	A1	19990401	WO 1998-DK406	19980918
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,				

KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
 UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
 CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9891539 A1 19990412 AU 1998-91539 19980918

AU 737597 B2 20010823

EP 1014921 A1 20000705 EP 1998-943723 19980918

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI

JP 2001517608 T2 20011009 JP 2000-512513 19980918

PRAI DK 1997-1077 A 19970919

DK 1998-165 A 19980205

WO 1998-DK406 W 19980918

AB The invention relates to enzymic foam **compns.** for bleaching or
 dyeing of **keratinous** fibers, e.g. **hair**, fur,
 hide or wool, comprising: (1) at least one oxidn. enzyme, typically an
oxidoreductase selected from laccases and related enzymes,
 oxidases and peroxidases; (2) at least one foaming agent, e.g. selected
 from soaps and anionic, nonionic, amphoteric and zwitterionic surfactants;
 (3) at least one **dye** precursor, e.g. selected from diamines,
 aminophenols and phenols; and optionally (4) at least one modifier, e.g.
 selected from m-arom. diamines, m-aminophenols and polyphenols. A foam
 formulation contg. laccase from *Myceliophthora thermophila* 0.1 mg/mL, a
dye precursor, p-phenylenediamine or o-aminophenol, 0.5%, SDS
 2.0%, betaine phosphate 2.0%, and buffer up to 100%, resp., showed better
 color uniformity compared to control, i.e. a "still water" **compn**
 . contg. a **dye** precursor concn. reduced by 50%.

ST oxidative enzyme foam dyeing hair fur; hide wool dyeing oxidative enzyme
 foam

IT Phenols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(amino; oxidative enzymic foam **compns.** for dyeing keratinous
 fibers)

IT Fur

Hide

Wool

(dyeing of; oxidative enzymic foam **compns.** for dyeing
 keratinous fibers)

IT Dyeing

(foam; oxidative enzymic foam **compns.** for dyeing keratinous
 fibers)

IT *Aspergillus*

Botrytis

Collybia

Coprinus

Coriolus

Fomes

Fungi

Lentinus

Myceliophthora

Myceliophthora thermophila

Neurospora

Phlebia

Phlebia radiata

Pleurotus

Podospora

Polyporus

Polyporus pinsitus

Pyricularia
 Pyricularia oryzae
 Rhizoctonia
 Rhizoctonia solani
 Scytalidium
 Scytalidium thermophilum
 Trametes hirsuta
 Trametes versicolor
 (laccase of; oxidative enzymic foam compns. for dyeing
 keratinous fibers)

IT Phenols, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (naphthols; oxidative enzymic foam compns. for dyeing
 keratinous fibers)

IT Amphoteric surfactants
Anionic surfactants
 Foaming agents
 Nonionic surfactants
 Oxidative hair dyes
 Zwitterionic surfactants
 (oxidative enzymic foam compns. for dyeing keratinous fibers)

IT Aromatic diamines
 Diamines
 Oxidative enzymes
 Phenols, biological studies
 Polyphenols (nonpolymeric)
 Soaps
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative enzymic foam compns. for dyeing keratinous fibers)

IT Dyes
 (oxidative; oxidative enzymic foam compns. for dyeing
 keratinous fibers)

IT Amines, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (phenolic; oxidative enzymic foam compns. for dyeing
 keratinous fibers)

IT 95-55-6, o-Aminophenol 95-70-5, p-Toluenediamine 106-50-3,
 p-Phenylenediamine, biological studies 151-21-3, Sodium dodecyl sulfate,
 biological studies 9002-10-2, Tyrosinase 9003-99-0, Peroxidase
 9004-82-4 9035-73-8, Oxidase 9055-15-6, Oxidoreductase
 58823-88-4, Betaine phosphate 80498-15-3, Laccase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative enzymic foam compns. for dyeing
 keratinous fibers)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Goldwell; EP 0548620 A 1993 HCAPLUS
 (2) Kyowa Hakko; EP 0310675 A 1989 HCAPLUS
 (3) L'Oreal; FR 2694018 A 1994 HCAPLUS
 (4) Novo Nordisk; WO 9723685 A 1997 HCAPLUS
 (5) Perma; EP 0504005 A 1992 HCAPLUS
 (6) Procter & Gamble; FR 2112549 A 1972 HCAPLUS
 (7) Wella; EP 0795313 A 1997 HCAPLUS
 (8) Yamahatsu; EP 0716846 A 1996 HCAPLUS
 IT 9002-10-2, Tyrosinase 9055-15-6, Oxidoreductase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(oxidative enzymic foam compns. for dyeing
keratinous fibers)

RN 9002-10-2 HCAPLUS

CN Oxygenase, monophenol mono- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 49 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1998:804150 HCAPLUS

DN 130:57002

TI Keratin fiber oxidation dyeing composition
containing an oxidoreductase enzyme

IN Maubru, Mireille

PA L'oreal, Fr.

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM A61K007-13

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9855083	A1	19981210	WO 1998-FR913	19980506
W:				
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2763841	A1	19981204	FR 1997-6802	19970603
FR 2763841	B1	20000211		
AU 9876604	A1	19981221	AU 1998-76604	19980506
AU 730767	B2	20010315		
EP 988021	A1	20000329	EP 1998-924391	19980506
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000513748	T2	20001017	JP 1999-501693	19980506
PRAI FR 1997-6802	A	19970603		
WO 1998-FR913	W	19980506		
OS MARPAT 130:57002				
AB A ready-for-use keratin fiber oxidn. dyeing compn., in particular for human keratin fibers such as hair, comprise, at least a heterocyclic oxidn. dye, at least an oxidoreductase enzyme with 2 electrons in the presence of at least a donor for said enzyme. An oxidative hair dye prepn. contained pyrazolol-[1,5-a]-pyrimidine-3,7-diamine.2HCl 0.666, 2-methyl-5-aminophenol 0.369, Uricase 20 IU/mg 0.8, uric acid 1.2, excipients and water q.s. 100 g. The compn. was applied on a gray hair for 30 min, then washed with a shampoo and dried to give a golden iris color.				
ST oxidn hair dye oxidoreductase enzyme				
IT Coupling agents				

Oxidative hair dyes

Oxidizing agents

(keratin fiber oxidn. dyeing compn.

contg. oxidoreductase enzyme)

IT Enzymes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(keratin fiber oxidn. dyeing compn.

contg. oxidoreductase enzyme)

IT 51-17-2D, Benzimidazole, derivs. 95-54-5D, 1,2-Benzenediamine, derivs. 95-55-6D, derivs. 106-50-3D, 1,4-Benzenediamine, derivs. 108-45-2D, 1,3-Benzenediamine, derivs. 123-30-8D, derivs. 533-31-3D, Sesamol, derivs. 1004-74-6, 2,4,5,6-Tetra-aminopyrimidine 1004-75-7, 4-Hydroxy-2,5,6-triaminopyrimidine 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 2652-77-9 3131-52-0, 5,6-Dihydroxyindole 4331-29-7, 4-Aminobenzimidazole 4701-08-0 4744-71-2D, 3,5-Pyrazolidinedione, derivs. 4770-37-0, 6-Hydroxyindoline 5192-04-1, 7-Aminoindole 5192-23-4, 4-Aminoindole 5318-27-4, 6-Aminoindole 5735-53-5D, Benzomorpholine, derivs. 6941-70-4 7556-37-8 7711-50-4, 4,7-Dimethoxy-benzimidazole 9002-12-4, Uricase 9055-15-6, Oxidoreductase 15918-79-3, 6-Aminoindoline 16461-98-6, 1H-Pyrazole-3,4-diamine 19499-83-3 26011-57-4 26021-57-8 26438-50-6 29274-23-5, Pyrazolo[1,5-a]pyrimidin-7-one 29539-03-5, 5,6-Dihydroxyindoline 35320-67-3, 4-Hydroxy-2-methylindole 45514-38-3, 4,5-Diamino 1-methylpyrazole 46160-00-3, 5,6-Dimethyl pyrazolo[1,5-a]pyrimidine-3,7-diamine 51437-33-3 52943-88-1 67021-83-4, 4-Hydroxybenzimidazole 69151-32-2 72721-02-9, 5,6-Dimethoxy-benzimidazole 81329-90-0 85926-99-4, 4-Hydroxyindoline 93846-05-0 94977-60-3, 4-Hydroxy-2-methylbenzimidazole 96013-05-7, 4-Amino-2-methylbenzimidazole 101948-27-0 102169-73-3, 1H-Benzimidazole-5,6-diol 102170-38-7, 4,7-Dihydroxy-benzimidazole 126462-95-1 130570-60-4, 6-Hydroxy-1-methylindole 131311-66-5 132026-21-2 145594-51-0 151406-76-7 151521-74-3 157587-56-9 157587-57-0 157587-58-1 184172-85-8 184172-97-2 184172-99-4 184173-00-0 184173-01-1 184173-02-2 184173-03-3 184173-43-1 184173-45-3 186963-53-1 186963-54-2 186963-55-3 186963-56-4 186963-71-3 197304-94-2 197355-52-5 197355-53-6 201599-12-4, Pyrazolo[1,5-a]-pyrimidine-3,7-diamine 201599-14-6, 2-Methyl pyrazolo[1,5-a]-pyrimidine-3,7-diamine 201599-15-7, 2,5-Dimethylpyrazolo[1,5-a]pyrimidine-3,7-diamine 201599-16-8, Pyrazolo[1,5-a]pyrimidine-3,5-diamine 201599-17-9, 2,7-Dimethyl pyrazolo[1,5-a]pyrimidine-3,5-diamine 201599-18-0, 3-Aminopyrazolo[1,5-a]pyrimidin-7-ol 201599-19-1, 3-Amino 5-methyl pyrazolo[1,5-a]pyrimidin-7-ol 201599-20-4, 3-Amino pyrazolo[1,5-a]pyrimidin-5-ol 201599-21-5, 2-(3-Amino pyrazolo[1,5-a]pyrimidin-7-ylamino)-ethanol 201599-22-6, 3-Amino-7-.beta.-hydroxyethylamino-5-methylpyrazolo[1,5-a]pyrimidine 201599-23-7, 2-(7-Amino pyrazolo[1,5-a]pyrimidin-3-ylamino)-ethanol 201599-24-8, 2-[(3-Amino-pyrazolo[1,5-a]pyrimidin-7-yl)-(2-hydroxyethyl)-amino]-ethanol 201599-25-9, 2-[(7-Amino-pyrazolo[1,5-a]pyrimidin-3-yl)-(2-hydroxyethyl)-amino]-ethanol 201599-26-0, 2,6-Dimethyl pyrazolo[1,5-a]pyrimidine-3,7-diamine 201599-27-1 217318-23-5 217318-24-6 217318-25-7, 1H-Pyrazolo[1,5-a]benzimidazol-6-amine 217318-26-8 217318-27-9 217318-28-0 217318-29-1 217318-30-4 217318-31-5

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(keratin fiber oxidn. dyeing compn.

contg. oxidoreductase enzyme)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Aaslyng, D; WO 9719999 A 1997 HCAPLUS
 (2) Kyowa Hakko Kogyo KK; EP 0310675 A 1989 HCAPLUS
 (3) Masahiro, A; Journal of Organic Chemistry 1996, V61, P5610
 (4) Samain, H; WO 9400100 A 1994 HCAPLUS
 (5) Yamahatsu Sangyo Kaisha; EP 0716846 A 1996 HCAPLUS
 (6) Yoshio, T; J Soc Cosmet Chem 1991, V42, P273
 IT 9002-12-4, Uricase 9055-15-6, **Oxidoreductase**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(keratin fiber oxidn. dyeing compn.
 contg. oxidoreductase enzyme)

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 50 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:632602 HCAPLUS

DN 127:283170

TI Agent and process for oxidative dyeing of keratin fibers

IN Kunz, Manuela; Le Cruer, Dominique

PA Wella Aktiengesellschaft, Germany

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

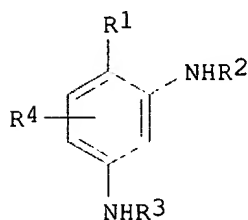
LA German

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 795313	A2	19970917	EP 1996-119343	19961203
	EP 795313	A3	19971022		
	R: DE, ES, FR, GB, IT				
	DE 19610392	A1	19970918	DE 1996-19610392	19960316
	JP 09249540	A2	19970922	JP 1996-355385	19961219
	JP 10007538	A2	19980113	JP 1997-67270	19970304
	US 5849041	A	19981215	US 1997-811614	19970305
	BR 9701309	A	19980818	BR 1997-1309	19970314
PRAI	DE 1996-19610392		19960316		
OS	MARPAT 127:283170				
GI					



I

AB An oxidative hair dye compn. comprises an O2

oxidoreductase/substrate system, a peroxidase, and a m-phenylenediamine coupler [I; C1-6 alkoxy, (substituted) C1-6 alkyl; R2, R3 = H, (substituted) C1-6 alkyl or mono- or dioxaalkyl; R4 = H, C1-6 alkyl] and has a pH of 6-9.5. Such compns.do not damage the hair and provide intense coloration, esp. when combined with direct dyes. Thus, a hair dye compn . contg. hydroxyethyl-p-phenylenediamine sulfate 0.025 mol, 2-amino-4-(2'-hydroxyethyl)aminoanisoie sulfate 0.025 mol, glucose oxidase (EC 1.1.3.4) 400 U, peroxidase (EC 1.11.1.7) 400 U, iso-PrOH 5.000,, 1,2-propanediol 2.000, PEG-20 stearyl ether 1.400, glycerin 1.000, glucose 1.000, di-Na EDTA 0.300, ascorbic acid 0.100, 2-amino-6-chloro-4-nitrophenol 0.075, and 0.1M borate buffer to 100.000 g, adjusted to pH 7.7 and applied to bleached hair for 30 or 60 min at room temp., conferred an intense brown color on the hair.

ST oxidative hair dye oxidoreductase
peroxidase; phenylenediamine hair dye
oxidoreductase peroxidase

IT Oxidative hair dyes

(agent and process for oxidative dyeing of keratin fibers)

IT 50-21-5, biological studies 50-99-7, D-Glucose, biological studies 57-88-5, Cholesterol, biological studies 64-17-5, Ethanol, biological studies 69-89-6, Xanthine 69-93-2, Uric acid, biological studies 95-55-6, o-Aminophenol 95-70-5, 2,5-Diaminotoluene 106-50-3, 1,4-Benzenediamine, biological studies 127-17-3, Pyruvic acid, biological studies 144-62-7, Ethanedioic acid, biological studies 615-50-9 2835-99-6, 4-Amino-m-cresol 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase 9002-17-9, Xanthine oxidase 9003-99-0, Peroxidase 9028-72-2, Lactate oxidase 9028-76-6, Cholesterol oxidase 9031-79-2, Oxalate oxidase 9055-15-6, Oxidoreductase 9073-63-6, Alcohol oxidase 66422-95-5 75448-50-9 77636-89-6 83763-48-8 90267-82-6 93841-24-8 93841-25-9 144630-46-6 144630-47-7 196408-55-6 196408-56-7 196408-57-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(agent and process for oxidative dyeing of keratin fibers)

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase 9002-17-9, Xanthine oxidase 9055-15-6, Oxidoreductase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(agent and process for oxidative dyeing of keratin fibers)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-17-9 HCAPLUS

CN Oxidase, xanthine (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9055-15-6 HCAPLUS

CN Oxidoreductase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 51 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1996:464484 HCAPLUS

DN 125:95537

TI Stable one-pack oxidative hair dye **composition** containing uricase

IN Tsujino, Yoshio; Tomura, Kazuyo

PA Yamahatsu Sangyo Kaisha Ltd., Japan

SO Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 716846	A1	19960619	EP 1995-108786	19950607
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CA 2150596	AA	19960617	CA 1995-2150596	19950531
	AU 9536624	A1	19960627	AU 1995-36624	19951031
	JP 08217652	A2	19960827	JP 1995-324370	19951213
	CN 1132623	A	19961009	CN 1995-119895	19951213
PRAI	JP 1994-313175		19941216		
AB	A 1-pack-type oxidative hair dye compn. with improved stability comprises uricase, an oxidative dye, uric acid , and optionally a reducing agent whose electrode potential is more pos. than that of ascorbic acid but more neg. than that of uric acid . The pH of the compn. is 6.7-9.5. Thus, a hair dye contg. p-phenylenediamine 2.0, m-phenylenediamine-HCl 0.1, m-aminophenol 0.8, Na2SO3 0.08, polyoxyethylene cetyl ether 8.0, stearyl alc. 2.5, oleyl alc. 5.0, behenyl alc. 2.0, cetyl alc. 2.0, cetyltrimethylammonium chloride 1.0, glycerol 2.0, uricase (20 IU/mg) 1.5, uric acid 5.0, ethanolamine to pH 8.75, and water to 100 wt.% conferred a grayish color on white hair.				
ST	oxidative hair dye uricase urate				
IT	Reducing agents (as stabilizers; stable one-pack oxidative hair dye compn. contg. uricase)				
IT	Stabilizing agents (reducing agents as; stable one-pack oxidative hair dye compn. contg. uricase)				
IT	Hair preparations (dyes, oxidative, stable one-pack oxidative hair dye compn. contg. uricase)				
IT	68-11-1, Thioglycolic acid, biological studies 134-03-2, Sodium ascorbate 616-91-1, N-Acetyl-L-cysteine 3374-22-9, DL-Cysteine 7757-83-7, Sodium sulfite RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (stabilizer; stable one-pack oxidative hair dye compn. contg. uricase)				
IT	69-93-2, Uric acid , biological studies 95-55-6, o-Aminophenol 106-50-3, p-Phenylenediamine, biological studies 108-45-2, m-Phenylenediamine, biological studies 123-30-8, p-Aminophenol 541-69-5, m-Phenylenediamine hydrochloride 591-27-5, m-Aminophenol 9002-12-4, Uricase 19142-74-6, Potassium urate RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				

(stable one-pack oxidative hair dye compn
 . contg. uricase)
 IT 9002-12-4, Uricase
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (stable one-pack oxidative hair dye compn
 . contg. uricase)
 RN 9002-12-4 HCAPLUS
 CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 52 OF 53 HCAPLUS COPYRIGHT 2002 ACS
 AN 1994:143670 HCAPLUS
 DN 120:143670
 TI Hair dye preparations containing indole or indoline derivatives, hydrogen
 peroxide and a peroxidase
 IN Samain, Henri; Dubief, Claude
 PA Oreal S. A., Fr.
 SO PCT Int. Appl., 30 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9400100	A1	19940106	WO 1993-FR617	19930622
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2692782	A1	19931231	FR 1992-7784	19920625
	FR 2692782	B1	19950623		
	EP 645999	A1	19950405	EP 1993-913170	19930622
	EP 645999	B1	19960131		
	R: DE, FR, GB				
	JP 07508271	T2	19950914	JP 1993-502094	19930622
	US 5538517	A	19960723	US 1995-360850	19950308
PRAI	FR 1992-7784		19920625		
	WO 1993-FR617		19930622		
OS	MARPAT 120:143670				
AB	Hair dye prepn. contain indole or indoline derivs. (Markush structure given), H2O2 and a peroxidase. A hair dye comprised 5,6-dihydroxyindole 1, EtOH 10, water q.s. to 100g, pH=6.4 in a container and horseradish peroxidase 2600 unit, 20 vol. H2O2 2.5, monoethanolamine q.s. pH=5.1, and water 100g in a sep. container.				
ST	hair dye indole hydrogen peroxide peroxidase; indoline hair dye hydrogen peroxide peroxidase				
IT	Hair preparations (dyes, indole or indoline derivs. and hydrogen peroxide and peroxidase in)				
IT	Carbohydrates and Sugars, biological studies RL: PREP (Preparation) (pyranoses, in hydrogen peroxide prepn., for hair dye compns. contg. indole or indoline derivs. and peroxidase)				
IT	1953-54-4, 5-Hydroxyindole	2380-82-7, 6-Hydroxy 5-methoxyindole			
	2380-84-9, 7-Hydroxyindole	2380-86-1, 6-Hydroxyindole	2380-94-1,		
	4-Hydroxyindole	3131-52-0, 5,6-Dihydroxyindole	4790-08-3,		
	5,6-Dihydroxyindole 2-carboxylic acid	4813-45-0, 3-Methyl			
	5,6-dihydroxyindole	4821-00-5, 1-Methyl 5,6-dihydroxyindole	4821-01-6,		

2-Methyl 5,6-dihydroxyindole 5107-75-5, 2,3-Dimethyl-5,6-dihydroxyindole
 5192-03-0, 5-Aminoindole 5192-04-1, 7-Aminoindole 5192-23-4,
 4-Aminoindole 29539-03-5, 5,6-Dihydroxyindoline 74795-36-1, 5-Methoxy
 6-hydroxyindoline 119963-90-5, 2-Methyl 5,6-dihydroxyindole hydrobromide
 121545-88-8, 4,5-Dihydroxyindoline 121545-90-2, 4-Hydroxy
 5-methoxyindoline 139721-20-3, N-Ethyl 5,6-dihydroxyindoline
 139721-21-4, N-Methyl 5,6-dihydroxyindoline 139721-22-5, N-Butyl
 5,6-dihydroxyindoline 151980-97-1, 6-Hydroxy-7-methoxyindoline
 151980-99-3, 6,7-Dihydroxyindoline

RL: BIOL (Biological study)

(hair dye preps. contg. hydrogen peroxide and peroxidase and)

IT 9003-99-0, Peroxidase

RL: BIOL (Biological study)

(hair dye preps. contg. indole or indoline derivs. and hydrogen
 peroxide and)

IT 7722-84-1, Hydrogen peroxide, biological studies

RL: BIOL (Biological study)

(hair dye preps. contg. indole or indoline derivs. and peroxidase and)

IT 50-21-5, Lactic acid, biological studies 50-99-7,
 Glucose, biological studies 56-84-8, Aspartic acid, biological
 studies 56-86-0, Glutamic acid, biological studies 59-23-4, Galactose,
 biological studies 64-17-5, Ethanol, biological studies 67-63-0,
 Isopropanol, biological studies 69-93-2, Uric acid, biological
 studies 87-79-6, L-Sorbose 127-17-3, Pyruvic acid,
 biological studies 144-62-7, Oxalic acid, biological studies
 9001-37-0, Glucose oxidase 9001-96-1, Pyruvate
 oxidase 9002-12-4, Uricase 9028-72-2, Lactate
 oxidase 9028-79-9, Galactose oxidase 9031-79-2, Oxalate oxidase
 9073-63-6, Alcohol oxidase 37250-80-9, Pyranose oxidase 37250-81-0
 39346-34-4, Glutamate oxidase 69106-47-4 71245-08-4, Secondary alcohol
 oxidase

RL: BIOL (Biological study)

(in hydrogen peroxide prepn., for hair dye

compns. contg. indole or indoline derivs. and peroxidase)

IT 9001-37-0, Glucose oxidase 9002-12-4, Uricase

RL: BIOL (Biological study)

(in hydrogen peroxide prepn., for hair dye

compns. contg. indole or indoline derivs. and peroxidase)

RN 9001-37-0 HCAPLUS

CN Oxidase, glucose (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-12-4 HCAPLUS

CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L70 ANSWER 53 OF 53 HCAPLUS COPYRIGHT 2002 ACS

AN 1991:519807 HCAPLUS

DN 115:119807

TI The application of oxidases to hair dyeing and permanent waving

AU Tsujino, Yoshio; Kitayama, Kouji; Yokoo, Yoshiharu; Sakato, Kuniaki

CS Yamahatsu Sangyo Kaisha, Ltd., Osaka, 557, Japan

SO J. SCCJ (1991), 24(3), 220-3

CODEN: JOSCDQ; ISSN: 0387-5253

DT Journal

LA Japanese

CC 62-3 (Essential Oils and Cosmetics)

AB The use of H₂O₂ produced by enzymic oxidn. was investigated for oxidative
 hair dyeing and permanent waving. For enzymic oxidns. **pyruvate**

oxidase, lactate oxidase, glycerol oxidase, xanthine oxidase, uricase and pyranose oxidase were used. Successful dyeing of goat hair was carried out using uricase and pyranose oxidase in a com. hair dyeing formulation with p-phenylenediamine. Uricase produced the max. H2O2 concn. up to about 0.06% after 5 min. of reaction at pH 7.0. The effect of enzyme on hair waving was estd. according to the Kirby method. Results on waving efficiency and wave retention ratio showed that permanent waving with uricase is almost equiv. to the chem. method with NaBr.

ST oxidase hair prepn peroxide
 IT Hair preparations
 (dyes, oxidases in, for prodn. of hydrogen peroxide)
 IT Hair preparations
 (wave-setting, oxidases in, for prodn. of hydrogen peroxide)
 IT 9001-96-1, Pyruvate oxidase 9002-12-4, Uricase
 9002-17-9, Xanthine oxidase 9028-72-2, Lactate oxidase
 9035-73-8, Oxidase 37250-80-9, Pyranose oxidase 69669-73-4,
 Glycerol oxidase
 RL: BIOL (Biological study)
 (hydrogen peroxide produced by, in hair dye and
 permanent waving compns.)
 IT 7722-84-1P, Hydrogen peroxide, uses and miscellaneous
 RL: PREP (Preparation); USES (Uses)
 (oxidases prodn. of, in hair dye and permanent waving compns
 .)
 IT 9002-12-4, Uricase 9002-17-9, Xanthine oxidase
 RL: BIOL (Biological study)
 (hydrogen peroxide produced by, in hair dye and
 permanent waving compns.)
 RN 9002-12-4 HCAPLUS
 CN Oxidase, urate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9002-17-9 HCAPLUS
 CN Oxidase, xanthine (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***